

# TIMES AND REGISTER.

A Weekly Journal of Medicine and Surgery.

Published under the auspices of the American Medical Press Association.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

Vol. XXL No. 17.  
Whole No. 633.

NEW YORK AND PHILADELPHIA, OCTOBER 25, 1890.

Yearly Subscription \$3.00,  
in advance.  
Single Numbers 10 cents.

## A MENSTRUUM.

### HORSFORD'S ACID PHOSPHATE.

This preparation has been found especially serviceable as a menstruum for the administration of such alkaloïds as morphine, quinine and other organic bases which are usually exhibited in acid combination.

The admixture with pepsin has been introduced with advantage when indicated.

The Acid Phosphate does not disarrange the stomach, but, on the contrary, promotes in a marked degree the process of digestion.

Dr. R. S. MILES, Glencoe, Minn., says: "I use it in a great many cases as a menstruum for quinine, when an acid is necessary."

Send for descriptive circular. Physicians who wish to test it will be furnished a bottle on application, without expense, except express charges.

Prepared under the direction of Prof. E. N. HORSFORD, by the

RUMFORD CHEMICAL WORKS, Providence, R. I.

BEWARE OF SUBSTITUTES AND IMITATIONS.

 CAUTION. Be sure the word "HORSFORD'S" is printed on the label. All others are spurious. Never sold in bulk.

## A PHOSPHORIZED CEREBRO-SPINANT.

(FRELIGH'S TONIC.)

### FORMULA.

Ten Minims of the Tonic contain the equivalents (according to the formulæ of the U. S. P. and Dispensatory) of:

Tinct. Nux Strychnos . . . . .	1 minim.	Tinct. Gentian . . . . .	$\frac{1}{2}$ minims.
" Ignatia Amara . . . . .	1 "	" Columbo . . . . .	$\frac{1}{2}$ "
" Cinchona . . . . .	4 "	Phosphorus, C. P. . . . .	1-30 gr.
" Matricaria . . . . .	1 "	Aromatics . . . . .	2 minims.

Dose.—Five to ten drops in two tablespoonfuls of water.

### INDICATIONS.

PARALYSIS, NEURASTHENIA, SICK AND NERVOUS HEADACHE, DYSPEPSIA, EPILEPSY, LOCOMOTOR ATAXIA, INSOMNIA, DEBILITY OF OLD AGE, AND IN THE TREATMENT OF MENTAL AND NERVOUS DISEASES.

One of the most widely known physicians in the country, residing in Washington, says: "The elegance of the formula, the small dose required, and its potency go far to recommend the Tonic to the profession in that large class of neuroses so common among brain workers in this country."

A well-known physician of Chicago, in practice since 1859, says: "It will be a revelation to most physicians. I have found it peculiarly adapted to the mentally overworked public school teachers, as well as the worn-out business man."

"I consider it the best Nerve Tonic I have ever used," says a Troy physician of thirty-four years of active practice.

A Philadelphia physician says: "Your Tonic is a noble remedy. Some of my patients call it 'The Elixir of Life.'"

In Atonic Dyspepsia and as an aphrodisiac it cannot be excelled."

The above and many similar letters from the profession can be examined at our office.

Over 13,000 physicians in New England and the eastern Middle States are prescribing the Tonic regularly.

**PRICE, \$1.00 PER BOTTLE, Containing 100 of the Average Five-drop Doses.**

Physicians' single sample delivered, charges prepaid, on application.

That each physician may be his own judge of its value, irrespective of the opinions of others, we make the following

**SPECIAL OFFER.** We will send to any physician, delivered, charges prepaid, on receipt of 25 cents, and his card or letter-head, half a dozen physicians' samples, sufficient to test it on as many cases for a week to ten days each.

The Tonic is kept in stock regularly by all the leading wholesale druggists of the country.

As we furnish no samples through the trade, wholesale or retail, for samples, directions, price-lists, etc., address,

**I. O. WOODRUFF & CO.,** Manufacturers of Physicians' Specialties,  
88 Maiden Lane, New York City.

# GARDNER'S SYRUP OF HYDRIODIC ACID.

**INTRODUCED IN 1878.**

The reputation which Hydriodic Acid has attained during the past 12 years was won by this preparation. Numerous imitations prepared differently, and weaker in Iodine, are offered, from the use of which the same therapeutic effects cannot be obtained. In ordering or prescribing, therefore, please specify "GARDNER'S," if the results which have given this preparation its reputation are desired.

**CAUTION.**—Use no Syrup of Hydriodic Acid which has turned RED. This shows decomposition and free Iodine. In this state it acts as an irritant, and fails to produce desirable results.

Descriptive Pamphlet and details of treatment in Acute Rheumatism, Hay Fever, Asthma, Bronchitis, Adenitis, Eczema, Lead Poisoning, etc., mailed to Physicians without charge upon application to the undersigned.

## Gardner's Chemically Pure Syrups of Hypophosphites.

Embracing the separate Syrups of Lime, of Soda, of Iron, of Potassa, of Manganese, and an Elixir of the Quinia Salt; enabling Physicians to accurately follow Dr. Churchill's methods, by which thousands of authenticated cases of Phthisis have been cured. The only salts, however, used by Churchill in Phthisis, are those of Lime, of Soda, and of Quinia, and always separately according to indications, *never combined*.

The reason for use of the single Salts is because of antagonistic action of the different bases, injurious and pathological action of Iron, Potassa, Manganese, etc., in this disease.

These facts have been demonstrated by thirty years' clinical experience in the treatment of this disease exclusively, by Dr. Churchill, who was the first to apply these remedies in medical practice. Modified doses are also required in this disease: seven grains during twenty-four hours being the maximum dose in cases of Phthisis, because of increased susceptibility of the patient to their action, the danger of producing toxic symptoms (as hemorrhage, rapid softening of tubercular deposit, etc.), and the necessity that time be allowed the various functions to recuperate, simultaneously, over-stimulation by pushing the remedy, resulting in crises and disaster.

A pamphlet of sixty-four pages, devoted to a full explanation of these details and others, such as contra-indicated remedies, indications for the use of each hypophosphite, reasons for the use of **ABSOLUTELY PURE** Salts, protected in Syrup from oxidation, etc., mailed to Physicians without charge upon application to

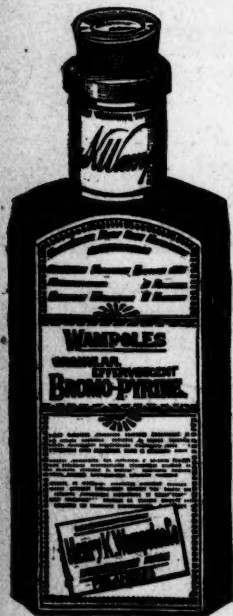
**R. W. GARDNER, 158 William Street, New York City.**

**W. H. SCHIEFFELIN & CO., New York, Sole Wholesale Agents.**

A Most Useful Compound for Headache, Neuralgic Pains, Irritable Stomach,  
Cardiac and Nervous Depressions, and Mental Exhaustion.

→ Wampole's Granular Effervescent →

## BROMO-PYRINE.



**DOSE.**—A heaping teaspoonful (containing 15 grains Bromide of Sodium, 1 grain Bromide of Caffeine, 3 grains Antipyrin) in half a glassful of water, may be repeated every hour until the desired result is obtained.

Antipyrin, Sodium Bromide, Caffein Hydro-Bromate.

Granular Effervescent Bromo-pyrine (large 4 oz.), per dozen, \$10.00; retail price, \$1.25.

Granular Effervescent Bromo-pyrine (small 2 oz.), per dozen, \$6.00; retail price, 75 cents.

**DISCOUNT, 10 PER CENT.**

PREPARED SOLELY BY  
**Henry K. Wampole & Co.,**  
Manufacturing Chemists,  
PHILADELPHIA.

A full line of Effervescent Salts, comprising all known combinations. Quotations cheerfully furnished for Salts in bulk. In Bulk, \$2.25 per pound, net.



The only prominent Emulsion of Cod-Liver Oil introduced directly to the medical profession.  
It is advertised exclusively in medical journals.

# HYDROLEINE.

HYDRATED OIL

Produces rapid Increase in Flesh and Strength.

FORMULA.—Each Dose contains:			
Pure Cod Liver Oil.....	30 m. (drops)	Soda.....	1-3 Grains
Distilled Water.....	5 "	Sulphuric Acid.....	1-4 "
Soluble Ferrous.....	5 Grains	Hydrochloric Acid.....	1-50 "

Recommended and Prescribed by  
EMINENT PHYSICIANS Everywhere.  
It is pleasant to the Taste and  
acceptable to the most delicate Stomach.

IT IS ECONOMICAL IN USE AND CERTAIN IN RESULTS.

**HYDROLEINE (Hydrated Oil)** is not a simple alkaline emulsion of oleum morrhuae, but a hydro-pancreatic preparation, containing acids and a small percentage of soda. Pancreatin is the digestive principle of fatty foods, and in the soluble form here used, readily converts the oleaginous material into assimilable matter, a change so necessary to the reparative process in all wasting diseases.

The following are some of the diseases in which **HYDROLEINE** is indicated:

**Phthisis. Tuberculosis, Catarrh, Cough, Scrofula, Chlorosis,  
General Debility, etc.**

**TO BRAIN WORKERS** of all classes, **HYDROLEINE** is invaluable, supplying as it does, the true brain-food, and being more easily assimilated by the digestive organs than any other emulsion.

The principles upon which this discovery is based have been described in a treatise on "The Digestion and Assimilation of Fats in the Human Body," and "Consumption and Wasting Diseases," by two distinguished London physicians, which will be sent free on application.

SOLD BY DRUGGISTS GENERALLY.

**C. N. CRITTENTON,**

SOLE AGENT FOR THE UNITED STATES.

115 FULTON STREET, N. Y.

A sample of Hydroleine will be sent free upon application, to any physician (enclosing business card) in the U. S.

## OUR FIVE-DOLLAR OFFERS.

We will send any one of the following combinations:

### No. 1.

The Times and Register.....	\$3.00
The Medical World.....	1.00
And any \$2.00 Journal, Book or Instrument in America.....	2.00
	<u>6.00</u>

### No. 2.

The Times and Register.....	\$3.00
The Dietetic Gazette.....	1.00
And either The Brooklyn Medical Journal, The Medical Mirror, or The Therapeutic Gazette } ....	2.00
	<u>6.00</u>

### No. 3.

The Times and Register.....	\$3.00
Minor Gynecological Operations. By Croon. Re- vised by McMurtry.....	1.50
Practical Electro-therapeutics. By Hutchinson...	1.50
	<u>6.00</u>

### No. 4.

The Times and Register.....	\$3.00
The Medical World.....	1.00
" " " Visiting List.....	1.50
(The only list published which can be presented as evidence of claim in a Court of Law.)	
The Medical World Ledger of Monthly Balances..	<u>.50</u>
	<u>6.00</u>

### No. 5.

The Times and Register.....	\$3.00
A Good Hypodermic Syringe.....	1.50
A Clinical Thermometer.....	1.50
(Both instruments warranted.)	
	<u>6.00</u>

### No. 6.

The Times and Register.....	\$3.00
The Earth Treatment. By Hewson.....	1.00
What to Do in Cases of Poisoning. By Murrell. Revised by Woodbury.....	1.00
The Self-lighting Pocket Lamp.....	.50
A Good Urinometer.....	1.00
	<u>6.50</u>

### SPECIAL OFFER.

The Times and Register.....	\$3.00
A good reliable Time Keeper, Waltham or Elgin movement, in nickel open-face case, 7.50	

We will send the above offer for \$10.00.

10.50

## Notes and Items.

**WANTED:** A married assistant to a physician with large practice. Address, giving experience, etc., to A  
Care TIMES AND REGISTER.

**CUMSO:** "Brown is using a fish diet to benefit his brain."  
**Banks:** "Well; judging from the present condition of his intellect it must be weak fish he is living on."—*Brooklyn Life*.

A FAMILY of four adults, with good furniture, desire to take a house with a physician in Philadelphia or vicinity. Appointments and service first-class. Address  
DR. W. F. WAUGH, 1725 Arch St., Phila.

**THE CASE ALTERED.**—"Isn't Jones a Christian scientist—a believer in the faith cure?"

"He is."

"Is it true that he wouldn't have a doctor for his wife the other day when she was sick?"

"It is quite true."

"Well, I saw a doctor go into his house just now."

"Oh, that's all right. He's sick now himself."

—*Cape Cod Item*.

**PROGRESSIVE APPRECIATION.**—The simple fact that any one article of daily use should be so thoroughly endorsed and commended as the disinfectant known so universally as Platt's Chlorides, speaks volumes in its praise.

Many, yes, very many, physicians of world-wide reputation have given their names in endorsement of this very worthy preparation, who never before or since have conferred a like tribute on any article.

The following from an eminent, but conservative, physician of Philadelphia is an instance:—

"I have used Platt's Chlorides for so long a time, that I have forgotten my earliest use of the preparation, and each time with renewed confidence in its merits. It is indispensable in the sick-room, and without a rival."

OLIVER P. REX, M.D. 1611 Race St., Phila.

## ==HEADWEAR==

**WILLIAM H. OAKFORD,**

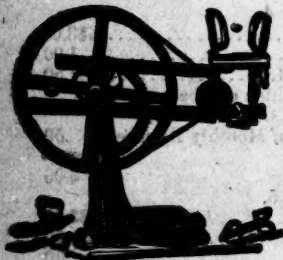
Ninth above Chestnut, opposite Post Office, Philadelphia.

Fine Goods at Popular Prices.

**GEO. H. TAYLOR, M.D.,**  
Originator and Consulting Physician.

**G. H. PATCHEN, M.D.,**  
Resident Physician and Director

### THE IMPROVED MOVEMENT CURE:



The "Manipulator," one of the machines used in giving mechanical massage.

Dear Doctor:

You ought not to practice another day without knowing the remedial value of MECHANICAL MASSAGE. This knowledge may be obtained by a personal inspection of the methods employed at The Improved Movement Cure, 71 E. 59th St., N. Y., where the EXPERIENCED application of MECHANICAL MASSAGE to chronic forms of disease is made a specialty, or by sending stamp for explanatory literature. All varieties of Dr. Taylor's Apparatus for sale.

**Eugene K. Plumly,**

211-213 Church St., Philadelphia.

MANUFACTURER OF

**PAPER BOXES.**

Druggists' and Manufacturing Chemists' work a Specialty,

## YARNALL'S Aseptic Minor Operating Case.



E. A. YARNALL PHILA.

- |                               |                         |
|-------------------------------|-------------------------|
| 2 Scalpels (different sizes), | 1 Aneurism needle,      |
| 1 Straight bistoury,          | 1 Grooved director,     |
| 1 Curved probe bistoury,      | 1 Spring forceps,       |
| 1 Curved sharp bistoury,      | 1 Amputating knife,     |
| 1 Tenaculum,                  | 1 Small amputating saw, |
| 1 Curved bone forceps,        | (with movable back),    |
| 1 Curved scissors,            | 2 Hemostatic forceps,   |
| 1 Eschmarch's tourniquet,     | 1 Straight scissors,    |
| with chain,                   | 1 Pair Silver probes,   |
| 1 Nelaton's bullet probe,     | Needles, wire and silk. |

### 20 Instruments in all, all Nickel-Plated.

The box is made of hard wood, polished, with a movable metal tray, making a thoroughly aseptic and convenient case.

Price, net, . . . . \$25.00.

**E. A. YARNALL,**

1020 Walnut Street, PHILADELPHIA, PA.

## GONORRHOEA

\* GONORRHOEA, GLEET, and all other urethral diseases, can be most successfully treated by using Soluble Medicated Bougies. A compact little pamphlet of 24 pages, on "THE TREATMENT OF GONORRHOEA AND ITS SEQUELAE," by means of medicated bougies, containing many valuable hints on treatment, will be sent *free*, together with samples of the bougies, to any physician who will mention THE TIMES AND REGISTER, and enclose his business card or letter heading.

Address, **CHARLES L. MITCHELL M.D.**

Manufacturer of Soluble Medicated Gelatine Preparations,

1016 Cherry Street, Philadelphia.

COMPLETE MAIL LIST of all the PHYSICIANS in the U. S.

**GEO. F. LASHER, PUBLISHER AND PRINTER**

1213 and 1215 Filbert Street. Philadelphia, Pa.

WRITE FOR CIRCULAR GIVING FULL PARTICULARS.

Addressed Wrappers size 10 x 10 inches, per 1000, \$1.00.

Addressing Envelopes, when furnished, per 1000, .75.

In Book Form, about 5000 names each, per book, 1.00.

PHYSICIANS send your address on postal card for insertion to Geo. F. Lasher, 1213-15 Filbert Street, Philadelphia, Pa.



## RESTORATIVE WINE OF COCA.

For Nervous Prostration, Brain Exhaustion, Neurasthenia, and all forms of Mental and Physical Debility.

This WINE OF COCA is so prepared that it contains the active principle of the leaves in a perfectly pure form. Moreover, it is absolutely free from all those foreign substances which all other wines of coca contain, and which interfere, to a great extent, with its curative influence. It is well known that the cocaine contained in the coca-leaves varies considerably in its proportion; hence, giving to the wines as ordinarily made, uncertain strength, and causing them to be unreliable in their action on the system. In the RESTORATIVE WINE OF COCA the proportion of alkaloid is invariable, and the physician can, therefore, prescribe it with the certainty of obtaining uniform results.

Prof. WM. A. HANFORD, M.D., says: A wineglassful of this tonic, taken when one is exhausted and worn out, acts as a most excellent restorative; it gives a feeling of rest and relief, and there is no reaction and no subsequent depression. A general feeling of pleasantness is the result. I have discarded other wines of coca and use this alone. It produces also excellent results in cases of depression of spirits; in hysteria, headache, and in nervous troubles generally it works admirably. It is a simple remedy, yet efficacious and remarkable in its results.

B. Each pill contains the one-sixth of a grain of the Hydrochlorate of Cocaine, two grains of the Sulphate of Quinine, and two grains of Acetanilide.

"Febricide" will be found to be possessed of great curative power in Malarial Affections of any kind, and in all inflammatory disease of which Fever is an accompaniment. For Neuralgia, Muscular Pains, and Sick Headache, it is a Specific.

Prof. WM. F. WAUGH, M.D., of Philadelphia, writes: In a case of persistent neuralgic headache, worse on awakening, with a possibility of malaria, "Febricide" gave instant relief.

No. 100 W. 7th STREET, CINCINNATI, O., Nov. 2, 1898.

On November 6th I was called in consultation to see Mr. W., who was suffering from the most violent attack of ASTHMA, the paroxysm so frequent that suffocation seemed only a matter of a little time. We gave him one "FEBRICIDE Pill" and ordered one every two hours; ordered hot mustard foot-bath; his doctor remained with him. I returned per request in seven hours; to my surprise, he was breathing, talking, and, as he informed me, felt first-rate.

DR. D. W. MCCARTHY.

SPRINGVIEW, NEB., November 25, 1898.

I have used your FEBRICIDE with excellent results in our Mountain Fevers (typhoid), reducing, in one case, the temperature from 104° with dry brown furried tongue in ten hours, to 99°, with tongue cleaning promptly and moist, and rapid improvement dating therefrom. Have used Antipyrene in similar cases with no good results.

ALBERT S. WARNER, M.D.

Containing Sulphate of Soda, Carbonate of Soda, Phosphate of Soda, Chloride of Sodium, Sulphate of Lime, Sulphate of Magnesia, and Carbonate of Lithia. For Habitual Constipation, Rheumatic and Gouty Affections, Biliousness, Corpulence, Dyspepsia, and all Derangements of the Digestive Tract, it is a wonderful remedy. Does not gripe after administration.

GRAND RAPIDS, MICH., October 8, 1898.

"Febricide Pills" have been used in a case of CHILLS from SEPTIC POISONING and worked to perfection, as they stopped them entirely where ordinary QUINIA HAD FAILED. Also kept down the temperature.

O. E. HERRICK, M.D.

Samples will be sent free of charge to any Physician who may wish to examine the same.

HEALTH RESTORATIVE CO., 10 West 23d St., New York:

## A TEXT BOOK OF DISEASES OF THE SKIN.

By JOHN V. SHOEMAKER, A.M., M.D.,

Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia; Physician to the Philadelphia Hospital for Diseases of the Skin; Member of the American Medical Association, of the Pennsylvania and Minnesota State Medical Societies, of the American Academy of Medicine, and of the British Medical Association; Fellow of the Medical Society of London.

8vo; with six chromo-lithographs and numerous engravings.

Price, in Cloth, \$5.00, postage prepaid.

"In no work on dermatology is so much attention paid to treatment."—*Medical Age*.

"We know of no better work for the student and general practitioner."—*Philadelphia Medical Times*.

"The book is admirable in its clearness of description, conciseness and thoroughness."—*Buffalo Med. and Surg. Jour.*

"It is everything a text-book should be, concise, clear exhaustive and well illustrated."—*Nashville Journal of Medicine and Surgery*.

"This book has an advantage, for the general reader, over most works on diseases of the skin, in that the new dermatological technical words and phrases are dispensed with as much as possible. The treatment recommended is such as almost any practitioner may carry out."—*Journal of the American Medical Association*.

"The present work of Dr. Shoemaker is likely to attract particular attention from the recognized originality displayed in the department of therapeutics."—*New York Med. Press*.

"It is particularly adapted to the needs of the family physician."—*St Louis Weekly Medical Review*.

"We can heartily commend this volume for its practical treatment."—*North Carolina Medical Journal*.

"The description of the therapeutics of the drugs and substances employed is very full and leaves nothing to be desired."—*London Medical Press and Circular*.

"We know of no other treatise on dermatology which is fuller than this one in suggestion as to treatment; symptomatology is also well presented; diagnosis is usually excellently given, and pathology concisely."—*N. Y. Med. Jour.*

"The description of the clinical features of the different diseases, their differential diagnosis, etiology and pathology are clear, concise, and sufficiently complete. The therapeutical part of the book constitutes its distinctive and most noteworthy feature."—*Journal of Cutaneous and Genito-urinary Diseases*.

PHYSICIANS SUPPLY CO., 1725 Arch Street, Philadelphia.

# THE PHILADELPHIA BOND AND INVESTMENT COMPANY.

**CAPITAL, \$100,000.00, FULL PAID.**

INCORPORATED MAY, 1890.

**JOHN BARDSLEY,**

*President.*

**WM. B. WOOD,**

*Vice-President.*

**SYLVESTER S. GARWOOD,**

*Secretary.*

**CHAS. LAWRENCE,**

*Treasurer.*


## DIRECTORS.

JOHN BARDSLEY, Manufacturer.  
S. S. GARWOOD, formerly of W. U. Tel. Co.  
ALFRED C. THOMAS, of Thomas & Co.  
CLARK A. BROCKWAY, Wanamaker's.  
WM. F. WAUGH, M.D., Medico-Chir. College.

WM. B. WOOD, late Kansas Loan and Trust Co.  
CHAS. LAWRENCE, 1435 Norris St.  
EDWARD F. POOLEY, of Pooley Bros.  
GEO. R. CRUMP, of H. J. & G. R. Crump.  
WALTER E. HUNT, of Trimby, Hunt & Co.  
O. C. BOSBYSELL, U. S. Mint.

**OFFICE : 1423 Chestnut Street, Philadelphia.**

## THE PHILADELPHIA BOND AND INVESTMENT COMPANY

OU insure your house and pay the company about \$100; when the house burns down you receive \$5,000. Where does the other \$4,900 come from. Not out of the capital stock; for in that case the stock of such companies would go begging; and if you want to know whether this is the case, just go down to Third Street, and try to buy a little stock in any well-established fire insurance company! Of course, we all know that your \$5,000 comes out of the pockets of forty-nine others, whose houses don't burn down; and who actually get nothing at all in return for their money; for all that, the insurance of property is right and proper; and no good business man neglects it. But if the principle is correct, why not extend it to other things besides losses by fire? And so it has been extended to losses by shipwreck, by flood, by dishonesty, and to losses by death. And although life insurance was denounced from the pulpit as immoral, as trading in human life, the innate truth of the principle upon which it was founded has become established; and now a man who neglects to insure his life is looked upon as quite as improvident as the one who does not insure his house.

But the applications of the system do not stop here. There are other things which can be insured as well as houses and lives. In the system adopted by the Philadelphia Bond and Investment Company,

**THE BOND DIES, NOT THE MAN.**



# ARTIFICIAL ARMS AND LEGS WITH RUBBER HANDS AND FEET.

(MARKS' PATENTS.)

Over ten thousand in actual use throughout the civilized world.

The use of rubber hands and feet on artificial limbs simplifies the construction, so that limbs can be worn for many years without requiring repairs. Persons engaged in every conceivable occupation operate on rubber feet, or use rubber hands to great advantage.

MR. A. A. MARKS.

McDONOUGH, N. Y., Nov. 1, 1887.

DEAR SIR: I have worn one of your artificial legs for nearly five years, and I am exceedingly well pleased with it.

The rubber foot is a grand invention; no squeaking or getting out of order. I am farming, and do all my work, such as plowing, sowing, cradling, and everything a farmer has to do. I have a farm of 100 acres, and do not keep any one to work for me. I can recommend you very highly in fitting from measurements. You could not have fitted mine any better if I had come to you.

Yours respectfully,

CHARLES E. WEBB.

A treatise of 400 pages, with 200 illustrations, and nearly a thousand indorsements and testimonials and formula for measuring, sent free of charge.



A. A. MARKS, 701 Broadway, New York City.

ESTABLISHED OVER 37 YEARS.

## Practical Electro-Therapeutics.

By William F. Hutchinson, M.D., Providence, R. I.

Dr. Hutchinson has been before the profession so long as a practical writer on electricity that it may be accepted as a fact that this will be the very best book of its kind.

Price, in Cloth, \$1.50, postage prepaid.

PHYSICIANS SUPPLY CO., 1725 Arch Street, Philadelphia.

First American from the Fifth English Edition

—OF—

## What to Do in Cases of Poisoning.

By DR. WILLIAM MURRELL, OF LONDON.

EDITED BY FRANK WOODBURY, M.D., OF PHILADELPHIA.

Price, in Cloth, \$1.00, postage prepaid.

PHYSICIANS SUPPLY CO., 1725 Arch Street, Philadelphia.

## A Manual of the Minor Gynecological Operations and Appliances.

By J. HALLIDAY CROOM, M.D., F.R.C.P.E., F.R.C.S.E., Ed.

First American edition from the Second English edition.

*Revised and Enlarged; with Twelve Plates and Forty Wood-cuts.*

Edited by L. S. McMURTRY, M.D., of Danville, Ky.

The best, most practical, and most useful work on Gynecology ever published.

Price, in Cloth, \$1.50, postage prepaid.

PHYSICIANS SUPPLY CO., 1725 Arch Street, Philadelphia.

# THE PHYSICIANS SUPPLY CO., Philadelphia

## 1725 Arch Street.

GEO. WHARTON McMULLIN, Manager.

### "ALCOHOL INSIDE OUT,"

By Dr. E. CHENERY,  
BOSTON, MASS.

CLOTH, PRICE, \$1.50, Postpaid.

Physicians Supply Company.

**R**OHRE'S chart of DISEASES OF THE EAR. Price,  
10 cents each. \$1.00 per 100, in tablets.

### SHOEMAKER

—ON—

### SKIN DISEASES.

Cloth, Price, \$5.00

**PURCHASING AGENCY** for articles required by  
the Physician.

**A**N excellent URINOMETER.

Price, \$1.00.

### THE DERMATOGRAPH

Price, 25 Cents, - - Postpaid.

**O**N SALE—Trommer's Physicians' Duplicating Prescription  
Blanks.

**WOOD'S MEDICAL LIBRARY.**—A full set of 36 volumes  
(1879-80-81). Volumes look almost new. Will sell for \$25.

### What to do in Cases of Poisoning.

By Dr. WM. MURRELL, of London.

Edited by FRANK WOODBURY, M.D.

Cloth, Price, \$1.00, Postpaid.

### PRACTICAL ELECTRO-THERAPEUTICS.

By WM. F. HUTCHINSON, M.D.

Cloth, Price, \$1.50, Postpaid.

### Manual of Gynecological Operations.

By J. HALLIDAY CROOM, M.D., F.R.C.S., Ed.

Revised and Enlarged

By L. S. McMURTRY, A.M., M.D.

Cloth, Price, \$1.50, Postpaid.

### A CHEAP FOUNTAIN PEN.

Price, 50 Cents, Postpaid.

A GOOD, RELIABLE AND HANDY

### HYPODERMIC SYRINGE.

Price, \$1.50, Postpaid.

AN EXCELLENT AND ACCURATE

### CLINICAL THERMOMETER.

Price, \$1.25, Postpaid.

### TWIN BULBS,

\$1.50.

**F**OR SALE OR EXCHANGE.—One Fleming's 32-Cell C. C. Battery, in  
perfect order, good as new, or will exchange for instruments. Cost  
\$65; will sell for \$35. Also, one Best Morocco Buggy Case, 14x9 1/2,  
containing 44 glass-stoppered bottles, 4 jars, mortar and pestle, tray for  
scales, and space for instruments. Cost \$21; will sell for \$10. Good as new.

**O**N SALE.—An "Allen Surgical Pump." Worth \$25 will sell for 20

**F**OR SALE.—A good average one-man practice, village and country, on  
Indiana Branch of P. R. R.; no other doctor; will take \$300 cash for  
practice and lease of house until July 1, 1893. The house is a fine dwell-  
ing of seven rooms, built expressly for a physician's residence, with  
nice lot, good stable and out buildings, house can be bought at low  
price if desired; reason for selling, an easier practice is wanted in a  
climate suited for asthmatics.

**M**ICROSCOPE—nearly new. Cost \$8.00; will sell for \$5.00. Also lot  
of physician's instruments, at reduced prices. Phys. Supply Co.

**W**ANTED to purchase good-will of a practice of over  
\$2,500 a year, in a R. R. Village of 800 to 3,000 inhabi-  
tants, New England or Middle States preferred. "Would  
take charge of a practice for 3 or 4 months."

Address, with full particulars, X. L.,

Care Physicians Supply Co.

### ON SALE:

JEROME KIDDER AND BARRETT  
BATTERIES.

### THE SELF-LIGHTING

### POCKET LAMP.

Price, 50 cents, Postpaid.

### VACCINE VIRUS

ON SALE AT REGULAR RATES, BOTH  
HUMAN AND BOVININE.

**W**HITE'S PHYSIOLOGICAL MANIKIN. Very little  
used; as good as new. Cost \$35.00. Will sell for \$20.00.  
Address, Physicians Supply Co.

**P**HYSICIAN'S Business and Residence for Sale.—Business  
established twelve years, one of the finest towns of its  
size in central Ohio, 30 miles from Columbus, 1,000 inhabi-  
tants, High School, two railroads, new two-story house, nine  
rooms and cellar, modern style, and very convenient; fine  
large farm, half-acre lot, stone walks to all out-buildings,  
grass lawn of 1/4 acre.

Price, \$1,875, covered by fire insurance; \$1,000 cash, balance  
in payments to suit. Best practice in town, but must leave  
on account of wife's health. Address, TIMES AND REGISTER.  
(Business \$2,000 per year).

### JOHNSON & JOHNSON'S

Antiseptic Dressings on Sale.

### ON SALE.

### THE SILVER SPIRIT LAMP.

PRICE, 60 CENTS.

### FOR SALE.

A physician in Burlington Co., N. J., wishing to go to City, will sell a  
paying practice and office furniture, etc., Population two thousand, two  
druggists, and but one other doctor. This is a rare chance. Price for all,  
\$450.00 cash. Address, Physicians Supply Co.

### A LOT OF PHYSICIAN'S INSTRUMENTS

nearly new, worth \$150.00. Will sell for \$75.00; send for list.  
Physicians Supply Co.

### EARTH IN SURGERY.

By ADDINELL HEWSON, M.D. Second Edition.

Cloth, Price, \$1.00, Postpaid.

### Lesions of the Vagina and Pelvic Floor,

—BY—

E. HADRA, M.D.

Cloth. Price, \$1.75 postpaid.

**W**ANTED.—\$50.00 will be given by regular physician of seven years'  
practice (three in public and private insane asylums), to person  
who secures for him a satisfactory position, in or near New York City  
preferred as assistant in public or private asylum, or as partner or as-  
sistant to physician with large practice. Best of reference given and re-  
quired. Address, "GOVERNMENT PHYSICIAN,"  
Physicians Supply Co., 1725 Arch St., Phila., Pa.

**L**ADIES: New Medical Guide, by Drs. Pancoast and Vanderboeck  
Cloth, price, \$2.50 postpaid. A valuable book for every woman.

**A** PHYSICIAN, who wishes to investigate homoeopathy, desires to ex-  
change for the following books:  
Arnold's System of Medicine, Ackford's Hand-Book of Homoeopathic  
Practice, Hughes' Salient Materia Medica or Hahnemann's, Durham's  
Lectures.



"What a boon it would be to the Medical Profession if some reliable Chemist would bring out an Extract of Malt in combination with a well-digested or peptonized Beef, giving us the elements of Beef and the stimulating and nutritious portions of Ale."—J. MILNER FOTHERGILL, M.D.

# Ale & Beef

**"PEPTONIZED"**

(EXTRACT:—BOVIS CUM MALTO.)

*Is the identical combination suggested by the late eminent Fothergill.*

**EACH BOTTLE REPRESENTS 1-4 POUND  
OF LEAN BEEF THOROUGHLY PEPTONIZED.**

It is the only Mild Stimulant combined with a Perfect Food known. It is very palatable, aids digestion, is retained by the most delicate stomach, and the purity of its ingredients is guaranteed.

## THE "PEPTONIZED" BEEF

is manufactured by Prof. Preston B. Rose, of Chicago, late of the faculty of the University of Michigan.

### THE ALE USED IS THE PUREST AND BEST MADE IN AMERICA

Especially brewed for this purpose, and guaranteed to be equal to the best imported ales, as only the best Canada Malt and the choicest new hops are used in its manufacture.

### IT IS A REAL FOOD; NOT A MERE STIMULANT,

as it contains all the albumen and fibrine of the beef as well as the nutritive qualities of the malted barley.

It is most useful during the period of Gestation, in allaying all vomiting, and invaluable to Nursing Mothers; also in Typhoid Fever and Dysentery.

Prof. G. A. Leibig says: "A careful chemical examination of the Peptonized Ale and Beef shows a much larger per cent. of nitrogenous blood and muscle-making matter over all other malt extracts, and that it is also rich in Diastase, giving it the power to digest Starch Foods."

PREPARED BY

**The Ale and Beef Company,  
DAYTON, OHIO, U. S. A.**

Two full-sized bottles will be sent FREE to any physician who will pay express charges. Please mention this journal.

# NOTICE

SEND FOR CATALOGUE.

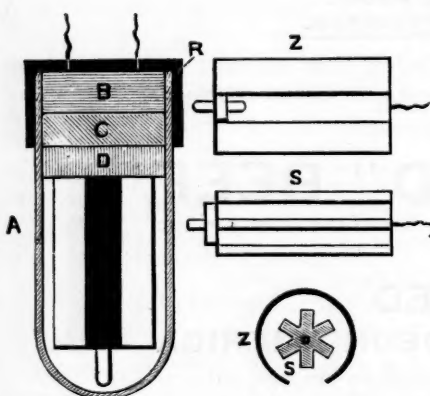
READ ENDORSEMENTS.

A meeting of the DIRECTORS of the **John A. Barrett Battery Co.** was held at their office on September 9th, 1890, and a resolution was passed to change its firm name into

## The Chloride of Silver Dry Cell Battery Co.

The same gentlemen who have heretofore conducted the business of the Company still have it in charge, which is a sufficient guarantee that no effort will be spared to maintain the high degree of excellence that their goods have always possessed. In future, address all correspondence to

## The Chloride of Silver Dry Cell Battery Co., BALTIMORE, MD.



CHLORIDE OF SILVER  
DRY CELL.

CHLORIDE OF SILVER  
DRY CELL.

CHLORIDE OF SILVER  
DRY CELL.

CHLORIDE OF SILVER  
DRY CELL.

CHLORIDE OF SILVER  
DRY CELL.

CHLORIDE OF SILVER  
DRY CELL.

*Every Instrument dealer of standing has our Batteries for sale.*

Catalogue containing list of dealers who carry a full line of all the instruments that we manufacture will be forwarded upon application to us.

Our batteries are so well known to be superior in every respect to any others on the market that further argument is not required.

## The Chloride of Silver Dry Cell Battery Co., BALTIMORE, MD.

### WALNUT LODGE HOSPITAL Hartford, Conn.

Organized in 1880 for the special medical treatment of  
ALCOHOL AND OPIUM INEBRIATES.

Elegantly situated in the suburbs of the city, with every appointment and appliance for the treatment of this class of cases, including Turkish, Russian, Roman, Saline and Medicated Baths. Each case comes under the direct personal care of the physician. Experience shows that a large proportion of these cases are curable, and all are benefited by the application of exact hygienic and scientific measures. This institution is founded on the well-recognized fact that Inebriety is a disease, and curable, and all these cases require rest, change of thought and living, in the best surroundings, together with every means known to science and experience to bring about this result. Only a limited number of cases is received. Applications and all inquiries should be addressed

T. D. CROTHERS, M.D.,  
Sup't Walnut Lodge, Hartford, Conn.

READ ADVERTISEMENTS ON PAGE XVII.

ESTABLISHED 1818.

MAKER OF FINE SHOES

FOR MEN AND WOMEN,

*Miles*  
23 S. Eleventh St.

23 S. Eleventh St., Philadelphia

We Make Shoes

which Insure

HEALTH, EASE & COMFORT.

Ready-made or to Measure.



Illustrated Catalogue sent on application.  
TELEPHONE NO. 2312



ALEXANDER W. MacCOY, M.D.,

Professor of Diseases of the Throat and Nose, Philadelphia Polyclinic and College for Graduates in Medicine,

**WRITES:**

THE MALTINE MANUFACTURING CO.

*Gentlemen:*

"MALTINE WITH HYPOPHOSPHITES" is a very satisfactory compound when the system requires not only fat-making material, but bone-making matter as well, and the form in which you have it renders the hypophosphites readily digested, while the combination quickly enriches the blood and restores the normal equilibrium of nutrition. In the treatment of chronic nasal catarrh, enlarged tonsils, chronic bronchitis, affections of the voice, etc., where a reconstructive is so often called for in conjunction with local treatment, "MALTINE WITH HYPOPHOSPHITES" has proved very prompt and beneficial.

The preparation is so pleasant to the taste that the taking of it becomes an agreeable rather than a distasteful duty. Very truly yours,

ALEXANDER W. MacCOY.

Philadelphia, Pa., April 25th, 1890.

Upon application we will send to any physician, who will pay expressage, a case containing an 8-ounce sample of this preparation.

**THE MALTINE MANUFACTURING CO., 19 Warren St., New York.**

# EARTH IN SURGERY.

SECOND EDITION.

BY ADDINELL HEWSON, M.D.

**PRICE, IN CLOTH, \*\*\* \$1.00, POSTPAID.**

PHYSICIANS SUPPLY COMPANY, 1725 ARCH STREET, PHILADELPHIA.

# LESIONS OF THE VAGINA AND PELVIC FLOOR.

With Special Reference to Uterine and Vaginal Prolapse.

BY B. E. HADRA, M.D.

**WITH EIGHTY-THREE ILLUSTRATIONS.**

CLOTH, 329 Pages, 12mo. PRICE, \$1.50.

PHYSICIANS SUPPLY CO., 1725 Arch Street, Philadelphia, Pa

# JOHN C. BAKER & CO.'S

## Standard Preparations.

Baker's Pure Cod Liver Oil Norwegian.

Baker's Emulsion With Hypophosphites  
of Lime and Soda.

Baker's C. L. Oil with Ext. of Malt.

Sol. Ferrous Malate A. P. M. CO.

Sol. Salicylate of Iron A. P. M. CO.

Fer. Malate, Gentian & Cinchona. A. P. M. CO.

LITERATURE MAILED ON REQUEST.

JOHN C. BAKER & CO.,

PHILADELPHIA.

# SANITAS

## Antiseptics, Disinfectants, and Oxidants.

"SANITAS" IS PREPARED BY OXIDISING TERPENE IN  
THE PRESENCE OF WATER WITH ATMOSPHERIC AIR.

### "SANITAS" DISINFECTING FLUID.

An aqueous extract of Air Oxidised Terpene. Its  
active principles include Soluble Camphor ( $C_{10}H_{16}O_2$ )  
Peroxide of Hydrogen and Thymol.

### "SANITAS" DISINFECTING OIL.

Air Oxidised Terpene. Its active principle is  
Camphoric Peroxide ( $C_{10}H_{16}O_3$ ) a substance which  
produces Peroxide of Hydrogen when placed in con-  
tact with water or moist surfaces (wounds, mucous  
membranes and other tissues).

"Sanitas" is Fragrant, Non-poisonous and does  
not Stain or Corrode. It is put up in the form of  
FLUIDS, OIL, POWDERS & SOAPS.

For Reports by Medical and Chemical Experts,  
Samples, Prices, etc., apply to the Factory,  
636 638, 640 & 642 West 55th Street,  
NEW YORK.

# Platt's Chlorides

## THE HOUSEHOLD DISINFECTANT

An odorless, colorless liquid,  
powerful, efficient and cheap.

Especially prepared to meet the  
daily sanitary needs of the careful  
housekeeper, and the hygienic de-  
mands of the intelligent physician.  
Invaluable in the sick room.

Indorsed by 16,000 physicians.

Sold in quart bottles only, by  
druggists everywhere. Price 50c.

## VINUM DIGESTIVUM

(PROCTER.)

### A Saturated Acidified Solution of PURE PEPSIN.

More than ten years since, this preparation was in-  
troduced to the profession, and we are pleased to be  
able to state that it is still the favorite with the large  
number of physicians who have tested and found its  
unfailing digestive power.—Apepsia and Indigestion  
in its various phases, and especially as they occur in  
infancy, indicate its administration.

MANUFACTURED SOLELY BY

WM. PROCTER, JR., CO.,

All Druggists, PHILADELPHIA.

I. G. ADAMS.

C. J. ADAMS.

Israel G. Adams & Co.,  
Real Estate & Insurance Agents,  
1421 Atlantic Avenue, below Michigan,  
Atlantic City, N. J.

TELEPHONE NO. 71,

LOCK BOX, 52.

Read the  
Advertisement

On Page vi.

PHYSICIANS: Are you in need of anything, if so  
write to  
THE PHYSICIANS SUPPLY CO.



# The Times and Register.

Vol. XXI, No. 17.

NEW YORK AND PHILADELPHIA, OCTOBER 25, 1890.

Whole No. 633.

	PAGE		PAGE		PAGE
<b>CLINICAL LECTURE.</b>		<b>RAILWAY SURGEONS' ASSOCIATION</b>	388	<b>THE MEDICAL DIGEST.</b>	
ANGINA PECTORIS. MIXED PNEUMONIA		When to Amputate. <i>Buchanan</i>	388	Treatment of Chronic Bright's Disease. <i>Lépine</i>	388
COMPLICATING A DOUBLE HEART LESION.		<b>EDITORIALS.</b>		Noma Following Typhoid. <i>Keim</i>	391
TRAUMATIC CERVICAL MENINGITIS. TY-		<b>DR. BARTHOLOW'S RETIREMENT</b>	389	For Cirrhosis of Liver. <i>Satterthwaite</i>	391
PHOID FEVER COMPLICATED WITH CROUP-		<b>ANNOTATIONS.</b>		Traumatic Tetanus. <i>Tancil</i>	391
OUS PNEUMONIA. RESULT OF HYDRO-		Preference of Patients for Physicians of the		For Diabetic Gingivitis. <i>Dujardin-Beau-</i>	
THERAPEUTICS. By Solomon Solis-Cohen,		Opposite Sex	390	<i>metz</i>	391
M.D.	373	Disinfection of Typhoid Excreta	390	Itching. <i>Bronson</i>	391
<b>ORIGINAL ARTICLES.</b>		Absorption of Drugs from Ointments	390	Ovariectomy for the Cure of Insanity. <i>Pfaff</i>	392
A CLINICAL STUDY OF SULPHO-CARBOLATE		The "Kreutzer Sonata" and Russian Mo-		For Diabetes. <i>Porter</i>	392
OF ZINC. By William Blair Stewart, A.M.,		rality	390	Administration of Chloralamid	392
M.D.	375	Railway Surgery	390	Toxic Effect of Calomel in the Presence of	
FOOD AND TUBERCLE. By Ephraim Cutter,		<b>LETTERS TO THE EDITOR.</b>		Chlorides of the Alkalies. <i>Adam</i>	392
M.D., LL.D., A.M.	378	Cardiac Ossification. <i>Reading</i>	391	Spinal Concussion. <i>Watson</i>	392
THE WEST INDIES AS A SANITARIUM. By		<b>BOOK NOTICES.</b>		Bacillary Partnerships. <i>Cornil and Babès</i>	392
William F. Hutchinson, M.D.	382	Essentials of Practice of Medicine. <i>Morris</i>	391	Chloroform. <i>Reece</i>	392
<b>SOCIETY NOTES.</b>		Saunders' Pocket Medical Lexicon. <i>Keat-</i>	391	Examination of the Sputum for Tubercle	
PHILADELPHIA COUNTY MEDICAL SOCIETY,	384	<i>ing and Hamilton</i>	391	<i>Bacilli. Kühne</i>	393
Rib-fracture from Muscular Action, with		<b>PAMPHLETS</b>	391	Pancreatic Digestion in Marasmus. <i>Gillet</i>	393
Forty Collected Cases. <i>Tunis</i>	384			Intestinal Obstruction. <i>Jessell</i>	393
				<b>MEDICAL NEWS AND MISCELLANY.</b>	394
				<b>ARMY, NAVY, AND MARINE HOSPITAL</b>	
				<b>SERVICE</b>	396
				<b>NOTES AND ITEMS</b>	iv, xiv

## Clinical Lecture.

### ANGINA PECTORIS. MIXED PNEUMONIA COMPLICATING A DOUBLE HEART LESION.

#### TRAUMATIC CERVICAL MENINGITIS. TYPHOID FEVER COMPLICATED WITH CROUPOUS PNEUMONIA. RESULT OF HYDRO-THERAPEUTICS.<sup>1</sup>

By SOLOMON SOLIS-COHEN, M.D.,

Professor of Clinical Medicine and Applied Therapeutics in the Philadelphia Polyclinic, Visiting Physician to the Philadelphia Hospital.

GENTLEMEN: I show you to-day a number of convalescents to demonstrate the results of treatment. First, we have here a case which some of you may remember as having been shown to the class in the early portion of the winter. It is a case of angina pectoris, the man having suffered from very severe, very prolonged and frequently repeated attacks of cardiac pain, associated with severe dyspnoea, and sometimes with syncope. The peculiar interest of the case lay in the large doses of nitroglycerine we were compelled to administer. We failed to get the desired effect from its internal use, and so we resorted to hypodermic injections, giving from ten to fifteen minims of the centesimal, or 1 per cent. solution in alcohol, at a dose. In addition he was, later, given the nitrite of sodium internally, in doses eventually increased to five grains, three times a day. Thus at one time he was taking forty minims of a 1 per cent. solution of nitro-glycerine—very nearly one-half minim of pure nitro-glycerine hypodermically—and fifteen grains of sodium nitrite by the stomach, in the twenty-four hours. Even this proved inefficient at one time, and we supplemented it by morphine with atropine hypodermically. Thus far we have had very good results, since he has had no attack since April 16, about eight weeks. As a matter of course his stomach has not been allowed to be overfilled, and his bowels have been kept open. After his attacks were somewhat controlled, and we had therefore considerably diminished the quantity of medicaments administered, we noticed a hysterical element in the case, in addition to the organic trouble. This led us to give hypoder-

mic injections of aqua destillata, and internally, pills of althea, the patient remaining under the impression that the nitrites were still being used. The hypodermic injections have now been discontinued and he is getting only the pills; as no further attack has been noticed in four weeks of this treatment, it may serve to illustrate the triumph of mind over matter. It must however be distinctly borne in mind that in the beginning, psychical influences would have been totally unavailing, to control even the morbid fear of attacks which aggravated their severity and perhaps increased their frequency. The decided physical effect produced by the drugs employed was the curative agency; the treatment by suggestion, merely served to prolong its good results, and overcome the element of fear still persisting.

This case was also before the class early in the course. The man, at that time, was recovering from an attack of influenza manifesting itself as a mixed pneumonia, neither exclusively croupous nor exclusively catarrhal, but sharing the clinical characteristics of both. Recovery has taken place notwithstanding very serious heart lesions of long duration, ten years or more; mitral incompetence and aortic stenosis, with some accompanying aortic incompetence. You may remember that during the acute attack his respirations had been at times greater in number than his pulse-beats. When the respirations reached sixty per minute, and often when they were not more than fifty, they exceeded his pulse. The interest in the case was chiefly therapeutic; namely: the absence in the treatment of all antipyretic drugs—which would certainly have caused his heart to cease beating forever—and the employment of atropine and strychnine in combination for the heart difficulty, instead of drugs like digitalis or strophanthus, which might, perhaps, have been deemed at first sight to be indicated. The nitrites were also employed from time to time, with advantage. The patient has gained in weight and strength since convalescence set in, and can now walk about quite comfortably. His shortness of breath is not marked, except after climbing two flights of stairs; his pulse today is 72, and respirations 20. His heart lesion remains, but we are fairly compensating it by the use of drugs. He is advised to keep comparatively quiet, but is allowed to go about a little for fresh air.

At the beginning of March this next patient, while

<sup>1</sup> Delivered at the Philadelphia Hospital.

intoxicated, fell from his chair in such a way as to bend his head under his chest. He remained unconscious for about an hour, but on recovering seemed perfectly well, and for two days attended to his work. On the afternoon of the second day he experienced pain in the back of his neck, dull and throbbing in character. Later, this pain extended into the shoulder upon the line of the spine of the scapula, and in the infra-clavicular region. He now took to his bed, where he remained for four weeks. His pain was now better, now worse, and at times he was unable to raise his head from his pillow. He then was admitted to the hospital. There was no swelling of the joints, and no pain in his limbs. He was unable to lie upon his left side because of the pain in his left shoulder, and on sitting up his head inclined markedly downward, forward, and to the right. There was pain on pressure over the fourth, fifth and sixth cervical vertebræ; especially marked in the interval between the fifth and sixth spinous processes. He could not lift his head, nor move it from side to side, and could nod but to a very limited degree. There was no spasmodic contraction of muscles however, as in ordinary torticollis. He could not abduct or lift the arm, though the fore-arm moved freely. Here we have a condition often erroneously called rheumatism; pain in the shoulder and head, stiffness of the neck, and inability to raise the head and arm. There is no heart lesion, no fever, and the trouble can be traced to a fall while in a state of intoxication, although immediately after the fall he was able to attend to his work. The conclusion was reached that we had to deal with a slow superficial meningitis, confined to a restricted area in the neck. Possibly there had been some involvement of the nerve roots, which would account for the pain in his shoulder and hand, and the slight paretic element present. Mild cases of this nature do not come to autopsy, so that an element of doubt is involved in the diagnosis; but to my mind the explanation given is the most probable.

The treatment has consisted in blistering six inches over the cervical spine and along the crest of the shoulder. He has been given increasing doses of potassium iodide, in saturated solution so that one minim of the solution contains nearly one grain of the salt. We began with fifteen minims three times a day, and ran up to thirty minims, stopping there because we had produced iodism. The improvement has been very rapid; he now has no pain and can move his head freely in all directions, and lift the arm at the shoulder. The bowels have been kept open by sulphate of magnesium, and all the secretions regulated.

Here is a patient who is convalescing from typhoid fever. He is aged eighteen years. He came into the house on the first of May, with a temperature at 3 P. M., of 102.6°; at 7.15 P. M., the same day, it had risen to 105.6°. The rose spots and the other symptoms indicated that the patient was in the second week of his fever, probably at the ninth or tenth day. He had not previously been treated, and had been walking about. The resident physician, Dr. Sothorn, who saw the patient on admission, following the standing instructions in my ward, immediately instituted the cold water treatment, and at 8.15 P. M., after cold sponging, the temperature had fallen to 102.2°. No antipyrin, antifebrin, or other dangerous explosive had been administered. I would have preferred cold bathing to sponging, but unfortunately the former is not as yet practicable in these wards. We begin sponging with tepid water, and during fifteen minutes gradually reduce the temperature to about 50° F. A little alcohol is added to promote

evaporation. As a matter of course the patient's temperature rose again, and at 10 P. M. it was 104.2°. Again he was sponged, and it fell to 101.8°, and so it has run throughout the course of the disease; the period of comparatively low temperature, however, gradually lengthening, while it has not risen above 103.5° since the first day after admission. The difference between the morning and evening temperature, usually so marked in enteric fever, is almost obliterated here by the cold water treatment, as is shown by this chart.

An interesting feature of this case is that this man had pneumonia with his typhoid fever, a rare complication. A great portion of the so-called typhoid pneumonias are pneumonias of a low type, having no enteric complications whatever; others are simply hypostatic congestions associated with bronchial catarrh in cases of enteric fever—still others are cases of mixed bronchial and intestinal influenza or catarrhal fever—but this man had, so far as physical diagnosis could inform us—and happily the confirmation by section is lacking—a genuine lobar pneumonia of the right base, complicating his typhoid fever. The treatment, in addition to cold sponging and the internal administration of salol, five grains four times daily, as an intestinal disinfectant, with calomel as required, to keep the bowel clean; was an ammonium mixture for his pneumonia, and counter-irritation, in the form of turpentine stupes following a mustard plaster, over the base of the right lung. Under this treatment he has recovered. I do not say he was cured, you will notice. The tendency of this disease is to recovery, barring accident, and all the physician can do is to bar the accident. This, I think, we have here accomplished. His diet, of course, was strictly regulated. The formula of the ammonium mixture which I prefer in cases like this, is as follows:

R.—Ammonii salicylat.,  
Ammonii carb. . . . . āā gr. v.  
Spt. ætheris nit. . . . . ℥xv.  
Ext. cocæ fld.,  
Glycerini . . . . . āā f̄ij.  
Liq. ammonii acetat. . . . q. s. ad f̄jss.

The erythroxylon coca is used to disguise the taste of the ammonium salts, and to act as a cardiac stimulant and tonic; the "nitre" is a mild diuretic, diaphoretic, and cardiac stimulant. A small quantity usually increases the efficacy of more active preparations of a similar class. This dose is given every two, three, or four hours, according to indications. The dose of the ammonium salts may be altered according to circumstances. I do not think that the value of the salicylic salt is appreciated generally to its full deserts. The amount of whiskey given was not very great. Towards the close of typhoid fever is the time to increase the amount of alcohol. We began with three ounces per diem, and increased to six ounces per diem towards the close. He is now on the compound tincture of cinchona. At one time in the disease we gave turpentine to meet special indications. When the tongue is dry and glazed and brown, and there is marked tympany or a tendency to heart failure or intestinal hemorrhage, turpentine is beneficial. It may be given in emulsion, five or ten minims every two to four hours as required. Sometimes it may have to be intermitted or even withdrawn altogether because of suppression of urine, strangury or even hæmaturia. I have seen similar ill-effects from terebene and from terpine hydrate. In what is technically known as the "cold water" or "Brand" treatment of enteric fever, no medicine is given. Systematic cold bathing is faithfully carried out. It is the best method of treatment of which I have knowledge.



## Original Articles.

ACLINICAL STUDY OF SULPHO-CARBOLATE OF ZINC.<sup>1</sup>

BY WILLIAM BLAIR STEWART, A.M., M.D.

FOR many years diseases of the gastro-intestinal canal, as well as those of other organs, were treated empirically; but, at the present day, with our knowledge of bacteria as an etiological factor, we are enabled to strike directly at the seat of the trouble, in many cases, and treat on scientific principles. It is not my intention, in this article, to review the whole field of antiseptics, nor to enter into a discussion of the intestinal antiseptics in general, but I wish to direct the attention of the profession to some of the results that have been obtained from the use of sulpho-carbolate of zinc. My attention was first directed to this drug in the fall of 1887, and, since that time, I have had an opportunity of studying its action in the treatment of affections of the gastro-intestinal tract and other organs.

## WHAT THEN IS SULPHO-CARBOLATE OF ZINC?

Sulpho-carbolate of zinc is a new unofficial salt, prepared by the action of a concentrated solution of barium sulpho-carbolate on zinc carbonate, by which sulpho-carbolate of zinc is formed.—Remington.

*Properties.*—It is a crystalline, transparent salt which is permanent in air. It is neutral in reaction, and has no smell. It has a taste somewhat bitter and cooling as well as astringent. It is soluble in water and alcohol and gives a perfectly clear solution. When heated moderately, the water of crystallization is thrown off and a white powder remains. When a higher degree of heat is applied, inflammable fumes are given off, which emit the odor of carbolic acid, and a white tasteless residue remains. With this brief reference to the drug, its preparation and properties, I will pass to a consideration of its therapeutic effects without entering into further details as to its chemical and pharmaceutical history.

Under the head of summer diarrhoea we find a class of maladies that often prove to be intractable and fatal under the ordinary forms of treatment, but now much can be done to effect speedy recoveries in many cases, and to diminish the mortality by the intelligent use of this valuable remedy—sulpho-carbolate of zinc.

Investigation has shown that most forms of summer diarrhoea are due to the irritation caused in the alimentary tract by certain disease germs, and their ptomaines which are developed in undigested and fermenting food. Bearing this in mind, many cases can frequently be relieved by a dose of aromatic syrup of rhubarb, or a dose of oil to stimulate the intestines to throw off the offending material. The main principle to be considered is that of *elimination*, for, so long as the poisonous matter remains in the bowels, we have a focus from which the trouble will spread, and no amount of antiseptic medicine will render it inert. However, it is not to these mild cases that I refer, but to those in which the ordinary cathartic will not bring relief.

Given, a typical case in which a child is vomiting; has pain in the stomach and bowels, with a high fever; what is the condition, and what are the indications for treatment? The whole trouble is traceable directly to the intestinal canal which is swarming with microorganisms and, what is worse, their

ptomaines. These germs, by their action, are a source of irritation to the intestinal mucous membrane, and also cause a fermentation and decomposition of the food or fluids which, with the ptomaines and secretions, cause the fetid discharge. What then happens? The absorbents take up the septic matter and ptomaines and throw it into the circulation, and, by this, we can account for the fever and constitutional symptoms.

Purgation has been sufficiently free, and the child is so sick that nothing in the nature of a strong dose could be retained on the stomach and, again, it is necessary to stop the violent drain on the system as soon as possible. The line of treatment is now evident, and what is wanted is a remedy that will be carried to the intestinal canal and kill the germs, neutralize the ptomaines and stop fermentation. The cause once removed, the constitutional symptoms will subside. It is almost impossible to find a remedy that can be administered in quantities sufficient to accomplish this result without endangering the life of the patient, but there is one remedy that can be given in efficacious doses, and that is the sulpho-carbolate of zinc.<sup>1</sup> To a child, two years old, I would give R.—Zinc sulpho-carbolate, gr. 1-4; bismuth subnit., gr. 1, every two hours, increasing the sulpho-carbolate at every dose, if necessary, until two grains would be given at one dose. As the symptoms subside, lengthen the interval for administering the medicine. If the first dose is vomited, persist every fifteen minutes or longer until a powder can be retained. If administered in this way, the first change noticed is in the vomiting, which is almost immediately checked after the first dose. The fermentation of the food is checked and the pain subsides as a consequence. After a few doses have been taken the fever and constitutional symptoms subside, the stools lose their odor, become less frequent and assume a normal condition. Sometimes the diarrhoea and fever do not subside under this treatment because the ptomaines and germs are active in the lower bowel and cannot be reached by the mouth. In this case, make a solution of five or ten grains of the sulpho-carbolate to the pint of hot water, and use freely at regular intervals as an injection. Do not be afraid to fill the bowel full of the solution or you may not obtain the desired result. In addition to this treatment, as in treatment of all other diseases, it is necessary to regulate hygiene and diet, and meet the other complications, as they arise, with the appropriate remedies. Good nursing is half of the battle.

There are those who advocate the use of other remedies, and, in some cases, undoubtedly obtain good results; but, many times, when we come to consider the rationale of their treatment we meet with great obstacles. Undoubtedly good results have been obtained from the use of other combinations, and I have found it so in my own hands, but it is well to have a variety of remedies from which to select, and this one is worthy of a high place in the catalogue.

A germ is a germ, whether in a man or a child, and it will take as much medicine to kill it in the one as in the other, except that we find a proportionately larger surface of mucous membrane in the adult. Bichloride of mercury has its advocates; but it is found that a dose sufficient to render the intestinal canal aseptic would kill or seriously endanger the

<sup>1</sup> Read before the Atlantic County, New Jersey, Medical Society, September 3, 1890.

<sup>1</sup> I do not wish to be quoted as saying that the intestinal canal can be rendered entirely aseptic, but the sulpho-carbolate will come as near producing this condition as any other remedy.

life of an adult. Again, it forms albumenate of mercury, which is not antiseptic. How much less would this remedy be applicable in children? "Hydro-naphthol has been used by an English physician as an intestinal antiseptic; but a limit of tolerance was reached before it rendered the intestines aseptic." (Waugh). Others claim that this salt is innocuous. (*Therap. Gazette*, Aug. 15, 1890, p. 544). It, as well as beta-naphthol, is not efficient or suitable in children. Salicylic acid and the salicylates are too irritant to the mucous membrane of the bowels, and are unpleasant remedies in children. Salol is a valuable remedy, and most excellent results are reported from its use.

As to the merits of the sulpho-carbolate of zinc: It has been given in fifteen-grain doses to an adult without causing any symptoms of irritation or unpleasantness, and one case is quoted by Dr. W. F. Waugh, of Philadelphia, where sixty grains in one day gave no unpleasant or toxic symptoms. Why, then, is the zinc salt preferable to the official sulpho-carbolate of soda or sulpho-carbolic acid? Phillips, in his work on *Materia Medica*, in speaking of the sulpho-carbolates, says: "The administration of these salts, however, offers an indirect method of giving carbolic acid. . . . These alkaline compounds, however, have less local irritant action, and up to the present time have not caused poisonous symptoms." (Page 866). Dr. Cerna (*Medical Times*, Vol. X, p. 209) sums up his article on the sulpho-carbolates as follows: "1. The sulpho-carbolates possess toxic properties for cold-blooded animals. 2. In warm-blooded animals these salts are innocuous." The zinc salt is more or less astringent, and has a better action on the mucous membrane of the bowel, and is a nerve stimulant, while the sodium lacks this virtue. The zinc salt also acts more like small doses of arsenic and copper, the virtues of which have been well established.

Again, Potter (*Therapeutics*, page 396) says of the zinc salts: "They manifest a much less tendency to accumulate in the system than the other metallic salts, and are excreted much more rapidly. Elimination takes place chiefly by the liver and intestinal glands." Zinc acts also as a nerve tonic. The general supposition was that the zinc sulpho-carbolate was not fit for internal administration, and for this reason it has been slighted by our authorities in its consideration; little space and attention being given to it. The pure sulpho-carbolic acid could not be given on account of its obnoxious smell and taste, as the little ones would rebel against it.

In the administration of germicides, the first principle to be observed is to give enough to destroy the germ without endangering the life of your patient. During the past two summers it has been my privilege to treat a great number of cases of summer diarrhoea and cholera infantum without the loss of one case, and my mainstay has been the sulpho-carbolate of zinc. I will mention two cases from my clinical record.

CASE I.—Martha J., aged ten months, was seized with violent vomiting and greenish diarrhoea. Nothing would remain on her stomach, and she was unable to retain any nourishment. There was some fever; pulse was high, and the child was very restless. It

R.—Zinci sulpho-carb. . . . . gr. 2½  
Lacto-peptine . . . . . gr. 12  
Bismuth subnit. . . . . gr. 18

M. Ft. chart No. 12.

Sig.—One every two hours until relieved; then increase the interval, and give as necessary to control the bowels.

was bottle-fed. The above prescription was ordered, and instructions in regard to diet were given.

From the first dose the child began to improve, and in two days had completely recovered. The zinc salt acted as an antiseptic, antispasmodic, and astringent; the pepsin as a digestant, and the bismuth as a sedative and astringent. During the remainder of the summer the child had several severe attacks, but was promptly relieved by the same treatment.

CASE II.—Mr. James G., a laborer, was seized with violent vomiting, cramps and fetid diarrhoea. I found him in bed, very weak, nervous, and restless, and still inclined to vomit everything he attempted to swallow. He was given a powder containing two grains of the sulpho-carbolate and two grains of bismuth, to be repeated every two hours. He improved from the first dose. Nausea ceased, pains disappeared, and after the fourth or fifth powder the diarrhoea ceased. He slept soundly all that night, and was put on a tonic, and in a few days was able to resume his duties in full.

I could cite many cases of similar character that have come under my care, and in every case the same uniform good results have been obtained.

I wish next to call your attention to another property of this agent, viz., its employment in combination with purgatives and other irritants (local) of the alimentary canal for its sedative effects. The griping produced by cathartics may often be measurably overcome by combination with the sulpho-carbolate of zinc. I have found it of especial value where a slight astringent action is desired in connection with cathartics, to prevent too free and active purgation. Ordinarily it acts very nicely in this combination, and is worthy of your attention. It answers very nicely to take the place of the opiates which are so frequently used with purgatives. A short letter received from Dr. T. S. Blair, of Chambersburg, Pa., will give a good idea of its use in this connection. He writes:

"In reference to the use of sulpho-carbolate of zinc, I would say that, aside from its usual purposes, I have employed it in acute summer diarrhoea and as a corrigent in various cathartic preparations in general use. For the common bilious attacks of adults I usually write as follows:

R.—Hydg. chl. mit. . . . . gr. 4  
Podophyllin . . . . . gr. ½  
Zinci sulpho-carb. . . . . gr. 1½

M. et ft. chart No. 3.

Sig.—One at six P. M., one on retiring, and, if necessary, the third powder in the morning.

"The above is very efficient in severe cases, and the zinc prevents largely the griping and nausea produced by the podophyllin. Owing to its astringent and antiseptic qualities, the salt is especially applicable in summer diarrhoea, and I usually exhibit it in a combination, as follows:

R.—Hydg. chl. mit. . . . . gr. 5  
Pulv. rhei . . . . . gr. 15  
Zinci sulpho-carb. . . . . gr. 3

M. et ft. chart No. 3.

Sig.—Take, in rice-paper wafer, same as in last R.

"This is for an adult. I find this mixture an admirable purge for general purposes, and have particularly noted its power of rapidly reducing fever due to indigestion or congestion of the bowels. I have used it a score of times in cases where a good purge was necessary and the patient could not leave his business. It produces the minimum of nausea and yet proper efficiency. In many cases I reduce



the quantity of Hg. For children I usually prescribe the proper quantity of blue mass or mercury and chalk, in place of calomel; but a slight increase over the ordinary dose is required, owing to the astringent quality of the sulpho-carbolate." \* \* \* \*

Dr. Boardman Reed, of Atlantic City, N. J., kindly contributes a few lines in relation to his experience in the use of this remedy: "A delicate child was brought here from a Western city in the early part of the present summer, suffering with chronic intestinal catarrh, which seemed to be a sequela of la grippe. It was a baby of about a year old, and though it was having only three or four slimy stools a day, was already considerably emaciated. After trials with various other remedies, the child was placed on the sulpho-carbolate of zinc, one-quarter-grain doses, combined with one grain of lacto-peptine after each feeding. Half a teaspoonful of castor oil was administered once in two or three days, to clear out the bowels, and cod-liver oil was rubbed into the skin every day. The result was quite satisfactory. The stools gradually became fewer in number and of better quality. In the course of a month after this treatment was instituted, the mucus had almost entirely disappeared from the stools, and the latter were beginning to be formed.

"I have used this drug in numerous other less stubborn cases of intestinal flux, and nearly always with satisfactory results. It combines the properties of a mild, but apparently active germicide with those of an efficient astringent."

All modern investigation and research point to the fact that typhoid fever is due to a distinct germ, which finds its habitation in the intestinal canal—confining its attacks to the mesenteric glands and the patches of Peyer. Prior to the discovery of the bacterial origin of this disease treatment was symptomatic, and the best and most successful remedies, that were then used empirically, were those that we now know to act as germicides. In addition to the actual use of antiseptics, we must also bear in mind the fact that there are remedies that can arm the body against the invasion of disease germs by rendering the body an unsuitable soil for their growth and development.

Without entering into a discussion of the merits and demerits of the old and well-tried methods of treating typhoid, I wish to present the clinical results of the use of the sulpho-carbolate of zinc in this disease. I am one of the firm believers that typhoid, in its first stages, is a localized disease manifested by constitutional symptoms due to the presence of micro-organisms that are inhaled or ingested with food or drink. These germs flourish and grow, and, at first, are confined to the stomach, when in an unhealthy condition, and upper bowel; later the lower bowels are attacked, and so great becomes the action of these germs that the system can no longer withstand them, and, as a consequence, their ptomaines are absorbed; great depression supervenes and frequently death. With this brief review of the etiology of typhoid, the rationale of the use of the sulpho-carbolate becomes apparent, as in the cases of diarrhoea.

I have seen many cases that presented the typical symptoms of incipient typhoid, which were aborted by the administration of two-grain doses of the sulpho-carbolate of zinc every three or four hours, for the first few doses, and then lengthening the interval. Dr. W. F. Waugh reported thirty-four cases of typhoid fever, which he treated with the sulpho-carbolate of zinc, and did not have a case in which perforation, hemorrhage or grave nervous symptoms ensued during the use of this drug, as was

the case with other remedies. Every case recovered. He gave three grains every two or three hours in a little water and noted that the stools soon became normal and lost their odor; diarrhoea was checked; tympanites subsided; the stomach became quiet; the temperature became one or one and one-half degrees lower, and the delirium and stupor subsided. No antipyretics were needed; but, in some few cases, where the heart was weak, stimulants were necessary. Bovinine, thickened with the white of an egg, constituted the best diet.

The great secret in the use of this, as well as all other antiseptic remedies, is to begin its use early in the course of the disease, and to use it persistently and in doses sufficient to render the alimentary tract as nearly aseptic as possible.

I have received a very interesting letter from Dr. W. G. Stewart in relation to the use of this drug, and it is worthy of a passing glance. It reads as follows:

"In December, 1888 and 1889, I treated seven cases of typhoid fever in one family, all well-marked and nicely defined cases of that disease. The general and leading symptoms were confined principally to the bowels—most of the cases having swollen and tender abdomens, with some hemorrhage. Temperature ranged from normal to 105° F. I treated these cases with the sulpho-carbolate of zinc, pepsin and opium. I gave the zinc in one-half to three-grain doses every two, three, or four hours, as indicated and according to age. Every one of the family recovered promptly, with no unpleasant sequela. The zinc salt is an invaluable remedy in all well-defined cases of typhoid fever, and should be given in all stages of the disease for its antiseptic properties, and as a guard against hemorrhage.

"In 1889, I treated about seventy cases of infantile diarrhoea and cholera infantum with the sulpho-carbolate of zinc, pepsin, bismuth and opium. The zinc was given in one-quarter to one grain doses every three or four hours, and with a uniform good result in every case.

"In August, 1889, a man of about forty-five years, called to see me who was suffering with the regular 'bloody flux.' I gave him three grains of the sulpho-carbolate of zinc, with one-half grain of opium every three hours. In twenty-four hours he was entirely relieved and resumed his regular duties on his farm.

"In January, 1890, was called to see a man of seventy-two, with hemorrhage from the stomach, vomiting blood in large quantities, and was in a very weak and reduced condition. I at once gave him five grains of the sulpho-carbolate of zinc in a wine-glass full of water, which stopped the vomiting and all hemorrhage. The zinc was continued in three-grain doses every four hours, and my patient has now entirely recovered, and has had no symptoms of any return of the hemorrhage.

"So far, in the summer of 1890, I have used this salt in about forty-five cases of diarrhoea and cholera infantum, and have obtained the same results as before. I am fully satisfied that in the sulpho-carbolate of zinc we have a valuable remedy; one on which we can rely with confidence. In all, I have treated over one-hundred and fifty cases with this drug, and in no case have I regretted the selection of the remedy."

Dr. George Grove, of Big Spring, Pa., a physician who has practised medicine for more than fifty years, writes that: "From the first dose of sulpho-carbolate of zinc, with bismuth and opium combined, in two cases of typhoid fever in the third week, the irritability of the stomach was relieved, and the stools lost

their fetid odor in twenty-four hours' time. I then gave cinchonidia every four hours, and in eleven days my cases needed no more attendance. These were cases of typhoid abdominalis. Regarding the diarrhoea of children, I think it is the *rem tendere* (or the thing intended.)"

Every drug will be used in some cases where it will not accomplish the desired result, and so with this one. A case just now comes to my mind where a physician used the sulpho-carbolate of zinc in a bad case of typhoid fever. The case was that of a young man, aged twenty-two years. He had a high temperature, and blood-stained stools. The sulpho-carbolate was given; but, in spite of all treatment, perforation and profuse hemorrhage supervened, and the patient died. Now it is altogether possible that the sulpho-carbolate was not used early enough in this case, and not in sufficient doses to accomplish the desired result. When typhoid, like all other diseases, has assumed a malignant form, in which the blood is disintegrated and the whole system depressed, it cannot be expected that this, or any other remedy, can repair the damage which has been done; death alone can end the scene.

I am unable to learn of any authentic cases of Asiatic cholera or yellow fever in which this remedy has been given a fair test; but I believe that it is well worth a trial in these affections. Owing to its astringent, anti-spasmodic and antiseptic properties, it seems to me that if the remedy were given boldly and in large doses (five to fifteen grains) every few hours, at the outset of these troubles, the disease might be checked, or greatly mitigated in its severity. This drug does not possess the same astringency as that found in the sulphate of zinc, but it will act much better locally in many cases; and, having in addition the antiseptic properties, is preferable.

By using from two to four grains of the salt to the ounce of water we have a very good injection for gonorrhoea, leucorrhoea, or gleet. In an article written by Dr. J. William White for the *Medical News* (June 14, 1890), he refers to the use of a combination of corrosive sublimate and boric acid in the treatment of recent anterior urethritis. He then says: "I felt, however, the additional need of an astringent, and for a long time employed the sulphate of zinc, for which I have recently substituted the sulpho-carbolate (two to ten grains to the ounce of the mixture). By using a ten to fifteen per cent. solution of peroxide of hydrogen as a menstruum, I then found that I had a formula which, both clinically and experimentally, showed excellent antiseptic qualities. In exceptional cases of profuse catarrhal secretion the addition of bismuth salicylate was also of advantage."

It is also very valuable as a lotion in discharging wounds and mucus surfaces. It has been used in balanitis with success. In the London Throat Hospital ("Wood's Medical Formulary," page 382) it is "used topically as a stimulant and antiseptic. R.—Zinci sulpho-carbolate, gr. 5; distilled water, ʒi. M.—Used by means of spray apparatus. Used in secondary syphilis of the larynx and pharynx."

Phillips (*Therapeutics*, page 866) speaks of its use in scarlet fever. "In twenty-nine cases, some extremely severe with suppression of rash and convulsions, all recovered except one (a syphilitic baby). Convalescence was most complete in seven to fourteen days. No topical treatment was practised, and Dr. Sansom fairly concludes that by the sulpho-carbolates the duration of the attack was shortened, the pyrexia lessened, and the throat symptoms especially benefited." Sulpho-carbolate of zinc is also used with

benefit, in the vomiting of pregnancy, with small doses of calomel.

Thus far, in my consideration of the sulpho-carbolate of zinc, it has been used in combination with bismuth, and the question that naturally presents itself is: Whether the action is obtained from the bismuth or the sulpho-carbolate? I have used it alone in treating diarrhoea, and have obtained very satisfactory results. It has been used by other practitioners, and at present some of our leading pharmacists are putting up the drug in the form of a tablet containing from one-half to two grains. It has been found, by my experience at least, that the sulpho-carbolate will act better in bowel complaints if combined with bismuth or pepsin. Any one of these drugs will act nicely alone in many cases, but, by their combination, we have a much more reliable and active prescription.

This constitutes the main portion of the literature now extant in relation to the use of sulpho-carbolate of zinc, and, in summing up the whole subject, entirely from a clinical standpoint—not a theoretical one—I am more than ever convinced of its usefulness and value in summer complaints and septic fevers.

I am very forcibly impressed with the saying, "Never be the first by whom the new is tried, nor yet the last the old to lay aside." It is the duty of every practitioner in medicine to seek and search for those remedies that will afford prompt and permanent relief, all "pathy" being laid aside; but it is not well to take up every new remedy that may be recommended by this, that, and the other man, unless a scientific and practical reason can be given for its use. *Clinical experience* in the use of drugs is the best way to decide their usefulness, and, no matter how plausible the theory may be, we must be guided by it in their use. The medicinal value of the sulpho-carbolate of zinc and the sulpho-carbolates has been sufficiently demonstrated at the bed-side and in the clinics to firmly ingraft them among the stable remedies at the hand of every practitioner.

*Authorities consulted.*—Works on Materia Medica and Therapeutics by H. C. Wood, Potter, Phillips, Brunton, Waring, Bartholow, Napheys, U. S. Dispensary, Remington's Pharmacy, *Medical Times*, *TIMES AND REGISTER*, *Therapeutic Gazette*, *Medical News*.

ATLANTIC CITY, N. J.

## FOOD AND TUBERCLE.<sup>1</sup>

By EPHRAIM CUTTER, M.D., LL.D., A.M.,

Hon. F. S. Sc., London, and President American branch of same. Author of Boylston Prize Essay, 1857, on Under What Circumstances do the Usual Signs Furnished by Auscultation and Percussion Prove Fallacious. Inventor of several forms of the Clinical Microscope; first to Photograph the Morphologies of Diseased and Healthy Blood, 1876, with Tolles' one-fiftieth and seventy-fifth-inch objectives, etc., etc.

### INTRODUCTION.

THE great aim of the physician should be to cure, if possible. Efforts, however praiseworthy, famous, and popular, that stop short of this, are not rounded out to full completeness and perfection. Those who advance our knowledge of causes of disease are entitled to honor and remembrance, but those who advance the cure are entitled to at least the same credit, if not more. If any one knows, or thinks he knows, the way to cure a disease deemed

<sup>1</sup> Being part of the discussion on tubercle, pathogeny and pathological anatomy, section of pathology—Tenth International Medical Congress.



incurable, it is his duty to make known the facts, and give opinions based on those facts; and, so long as he observes the rules of good breeding, he is entitled to a respectful hearing.

Controversy must be waged on *facts*, not individuals. Science is based on facts. Uniformity of opinion is impossible. Witness the want of agreement as to ether and chloroform, though used freely by all schools of medicine since their discovery.

The medical world holds a congress. Its members are expected to contribute to the common stock of knowledge, as when a congregation takes up a collection for a benevolent object. Each one gives as he has means, gold, silver, or nickel. He gives of his own. Now here, in place of money, we give ideas and histories. So I give my nickels. If, by this act, any one is treated better in consumption the contributor shall be satisfied.

#### CONSUMPTION IS CURABLE.

*Fact 1.* Docent Dr. Heitler, of the Pathological Institute of Vienna, in 1880 published an account of his having met with about sixteen thousand autopsies of persons of all ages, sex and condition, dying from all causes, in which he noted that nearly five per cent. had had consumption of the lungs which had got well, or the case had died from consumption developed in other parts of the body.

*Remarks.*—If this statement is incorrect, please correct it.

*Fact 2.* In a work on disease of the chest, published by the late Dr. W. W. Gerhard, of Philadelphia, about 1850, he speaks of the curability of consumption by Red Sulphur Springs Water.

*Fact 3.* About 1860 a maternal uncle of mine died, aged 66, of Bright's disease. At the autopsy were found five stellate cicatrices in the upper lobe of the left lung of old cavities. In his youth he had cough, hemoptyses, lost flesh and strength, and was said to have been consumptive. I think it was so.

*Fact 4.* Dr. H. I. Bowditch, son of the eminent mathematician, Nathaniel Bowditch, of Boston, well known as the author of "Bowditch's Navigator," in June, 1889, called me to his house to hear him read an account of his father's case of consumption, cured by taking a six-weeks' carriage journey. This report has been read before the American Climatological Association, and published.

*Fact 5.* In the appendix of this paper is published one hundred cases of consumption; twenty-one non-arrests, thirty-nine temporary arrests, and forty permanent arrests of the disease.

*Remarks.*—These facts convince me, and for one I cannot, in face of them, tell my patients in consumption their cases are absolutely hopeless; if I did so, these facts would contradict me.

#### WHAT FOOD HAS TO DO WITH CONSUMPTION.

1. The one hundred cases alluded to were all treated on food basis. Without the diet they could not have had the history reported.

2. Food causes tubercle.

(a) In 1858 (see "The Relation of Alimentation and Disease," by J. H. Salisbury, M.D., LL.D.: J. H. Vail, New York, publisher), six hundred swine were fed on good sweet maize. None died.

(b) Close to them one thousand and twenty-six hogs were fed on sour swill from a distillery. In the course of eight weeks two hundred and fifty-six died. Of these, one hundred and four were autopsied, and seventy-nine were found to have tubercle in lungs.

*Remarks.*—Some would say these facts are not so. Tubercle was not found. Other scientists do not re-

port such results. All right. Just so the results of the East India commission as to ether and chloroform have been rebutted by the results of the late work of Philadelphia experts. Again, it makes a ground of difference as to what one looks for in an examination. Before our late war, 1861, emery came only from the island of Naxos, I am told. For a long time mineralogists knew of a source of a peculiar form of magnetic iron ore near Lee, Mass. After our war began, and there was a great demand for emery, some practical expert examined this magnetic iron ore locality with a view to find emery of better quality than the Naxos, and the discovery of it was of the greatest importance to America. So it seems the savans did not look at the subject in the right light. Would that the profession would repeat these experiments on swine, with a view to the production of tubercle, and report their results. They might not agree any better than the etherists or chloroformists, but some good would come from the work. To my mind these experiments and cases are enough to satisfy me of the causal relations of food in acetic acid fermentation to cause tubercle.

#### BUT WHAT WILL YOU DO WITH THE BACILLUS OF KOCH?

*Reply.*—It is found in sour fermenting food, and I photographed it in 1876 with the one-fiftieth-inch objective of Tolles. I can throw this photograph on the screen. The illustrations that accompany this paper are but a few photogravures of microphotographs that I have made; their number runs far beyond one hundred. I have the text of an essay on the pretubercular state, to be illustrated by a large number of microphotographs. This work will be published whenever the profession demands it.

This bacillus, from thirty to forty years, has been recognized by cryptogamic botanists. Some were of the opinion that it was present as an accident; others that it was a baby form of the acetic acid fermentation vegetation. It is to the honor of Dr. Koch to have settled this question as to being a baby form capable of reproduction in the baby stage. He, however, has not told us where it comes from, and has tied us up by coining bacteriology, which covers but a small portion of the micrological world. Again, his power to reproduce the disease by inoculations is due to the animalization of this innocent bacillus into a deadly power. I do not agree that tubercle is contagious. It certainly is not like small-pox, scarlet fever, diphtheria, or measles.

To my mind the whole life history of the bacillus includes the mycoderma aceti and saccharomyces cerevisiae. To leave them out seems to me as reasonable as for me to give an account of the people I meet in this country by writing about the German babies and give no reference to the German boys and girls, men and women. Usually oak trees make more impression and do more good than acorns, though acorns should not be omitted in treating of oaks. But in this case the treatment is reversed in the writings of the bacteriological schools. Please remember this is writ—not controversially, but contributionally—as part and parcel of my own personal, practical experience, which, as a lesser light, only reflects the author quoted above. Those who will kindly peruse the appendix will see the details of treatment; those who consider these cases as idle tales—if they live long enough—may change their minds; but they cannot blame me for not having told what I knew in my time, and backing it up with original microphotography, which includes the work of the highest

power objectives ever used by man, to wit, the seventy-fifth- and the one-fiftieth-inch objectives of Tolles, and solar projection of living specimens, when circumstances permit.

#### ONE HUNDRED CASES.—RÉSUMÉ.

##### SERIES I.—*Non-arrests*, 21 cases.

- (a) Cases that were not improved, 9.
- (b) Cases that were on partial diet, or were too ir-resolute, or had bad surroundings—financial, climatic, etc., 12.

##### SERIES II.—*Partial arrests*, 39 cases.

- (a) Cases that followed the treatment faithfully, 19.
- (b) Cases that did not follow the treatment faithfully, 9.
- (c) Cases that had bad surroundings, that died of pneumonia, etc., 11.

##### SERIES III.—*Permanent arrests*, 40 cases.

- (a) Tuberculosis, 32 cases.
- (b) Pretuberculosis, 8 cases.

NOTE.—The details of these one hundred cases have to be left out. They are made up of probably as severe a series of one hundred cases as is commonly found. Some of the permanent arrests are of twenty-five years' standing.

#### RATIONALE.

1. Tuberculosis is a systemic and not a local disease primarily.

2. Tuberculosis is a diseased condition or state due to the presence of a yeast in the blood with its fermentative products.

3. The yeast is introduced into the blood, through the alimentary canal, from starch and sugar in excess, and in a state of fermentation.

4. The physical micrographical conditions found in the blood of tubercular cases constitute the peculiar morphology so often alluded to. The main features are as follows:

- (a) Spores of vinegar yeast.
- (b) Spore collects.
- (c) Fibrin filaments unusually large and prominent.
- (d) Enlarged massal white corpuscles. This enlargement proceeding from the white corpuscles being unusually fertile niduses of the vegetation, called entophytal, similar examples of which abound in algæ.
- (e) Deprivation of the red disks of their coating of neurine, thus rendering them sticky, adhesive, and singularly inclined to aggregate themselves in confused masses. At the same time they lose their color, their clean-cut outlines and are diminished in number, relatively and absolutely.

(f) Thrombi formed of the fibrin filaments, of the massal corpuscles, of the spore collects.

(g) All of the foregoing have been photographed with Tolles' objectives, from the one-fourth to his one-seventy-fifth.

5. The vegetations may exist in a latent state.

6. It may be transmitted from parent to child in the milk, but the greater point of interest is in the tuberculous diathesis, produced by the same feeding in families for generations.

7. The morphology of the blood is commonly present some time during one year before organic disease. In other words, there is a new physical sign of the pretubercular state. The senior writer has a monograph on that subject alone, illustrated with many microphotographs.

8. Food, then, is the agent of tremendous power that causes tuberculosis.

9. The treatment is based on the idea of removing the cause by ridding the blood of the presence of the

yeast and its fermentative products by a process of starvation.

10. Tubercle is a secondary product—a result from embolism caused by the minute thrombi of fibrin filaments—of the massal corpuscles and of the spore collects, and also from mechanical and chemical effects of the embolism on the nutrition.

11. The breaking down of the tissues comes from a necrosis, caused by this overloading them with the products of fermentation.

12. The yeast is also found in the alimentary canal, on the skin, in the sputum, etc.

13. Flour has been raised into bread by the dejecta of third-stage consumptives.

14. The progress of the case is best watched and studied in the morphology of the blood. The spores are diminished, the filaments removed, the enlarged massal white corpuscles are reduced in size to normal proportions; the red discs acquire their normal color covering and clean-cut outlines; the fibrin filaments, are hardly visible. Thus the red discs dispose themselves in the normal manner, the more perfectly as the cure proceeds. Any deviation in the regimen is indicated by the increase of the abnormal morphological elements in the blood. As the blood improves, usually the general symptoms improve, *pari passu*. We have often witnessed, under treatment, the disappearance of rales of all kinds, night sweats, emaciation; the reduction of the heart to normal size and frequency of beats, simply because of taking away the load it had to carry, when the blood was filled with thrombi, and was ropy and sticky.

15. This diagnosis by blood examinations does not exclude ordinary physical explorations; it supplements them; we find that the ordinary idea of this diagnosis in the profession is that sanguinology is like urinology, and all that is necessary is to take specimens of blood, just as we do urine in other diseases, and base all our diagnosis of tuberculosis on such examinations. The very suggestion of this demonstrates how far the proposer is from having a true idea of the subject; the evidence must be collected with the least possible interval of time between the removal of the blood from its stream to the stage of the microscope; the capillary circulation is to be used; not the venous or the arterial; take blood from the radial or ulnar side of the forearm, by slight puncture with scarificator or scalpel; do not prick the finger; the student must study the morphology of the skin as well as that of the blood.

16. There are other diseases in which normal blood morphology is changed, to wit: Rheumatism, cystinæmia, syphilis, ague, etc.

17. This rationale explains the cough, where it is not due to local irritation in the air-passages, such as hyperæmiæ, ulcers, infiltrations, reflex irritations, to the presence of carbonic acid gas in excess; sometimes it is wonderful how diminishing the fermentation does away with the cough.

18. This rationale explains hemorrhages as the result of local action of vegetation on the glue tissues, the connective tissues being softened, disintegrated and broken down by the products of fermentative changes.

19. It explains the night sweats as due to the interstitial necrosis of tissues, thus throwing more work on the skin; hence the injunction to take good care of the skin and help the lungs while they are being healed.

20. The emaciation and loss of flesh and strength are only the results of the great tissue destruction going on.



21. The sputum must be studied for lung fibers, for the various crystals that are found in asthmatic conditions, and also the gravel, granular and encysted.

22. Old fashioned or fibrous consumption is due to holding of the yeast products in the stomach, to the gradual paralysis of the lungs by carbonic acid gas, with the consequent hyperplasia of the connective tissues, and to the deposit of gravel in this hyperplasia of the fibrous tissues; in this condition the blood morphology is not so much altered; the diagnosis must be made on more general grounds; the treatment is practically the same, however.

23. The condition of the liver and kidneys can be determined by watching the urine; it should be tested at least twice a week, and kept at a specific gravity of 1,015 to 1,020, free from bile, odor or deposit.

24. Physiologists say that man cannot live on beef alone; the chemist says (Gamgee) that beef contains all of the elements found in the tissues of the human body. We say, that in cases of consumption, Bright's disease, uterine fibroids, where the special case has indicated a rigid diet of beef, such a dietary has been ordered and some patients have lived on it for four years; thus the dictum of the physiologist is upset.

25. It has been sneeringly said that all that was needed if the ideas here given as to consumption are true, that a man prescribe beef and hot water; yet the contributor had his son study the general sciences four years, medicine four more, and special cases three more years, before he was willing to leave his practice in his care; the art of treating chronic diseases, even by positive food plans and judicious medication, is an extremely hard one to acquire.

26. Air is food. Yet consumptives have been cured in the rawest and dampest of climates, and so many times that we must go behind the old idea that climate was the only cause of consumption; granted that bad climate helps to cause the disease, and so also will worry, trouble, grief, assist towards death; the sending of patients away from home comforts to die elsewhere, is not the thing to be advised. If home comforts, good air and the proper food can be combined, by all means use them. This is written with the knowledge that pulmonary disease has been arrested by climate. But our aim is to cure the cases wherever they are, because many cannot afford to change their climate or to live the remainder of their lives in the Adirondacks or Colorado.

27. Remove from the atmosphere of the patients, all doubters, sneerers and those that argue, but never cure; agnostics and nihilists, not content with helping no one, they will endeavor to pull down your work.

More permanent arrests could have been secured of these one hundred cases if the patients had been left alone.

28. While encouraging the patient at all times and in all emergencies, give him to understand what he is fighting; that he must not waste his nerve forces by needless thought or worry, but to hold on persistently and wait for nature to do the work. Each case is a law unto itself. This can be seen by the study of the cases herein recorded. We are finite; death is certain. No man will ever cure one hundred per cent. of his cases—may we say of any disease?

29. If all will take hold firmly, at least fifty per cent. of tubercular cases can be cured, judging from our own clinical experience. Now that consumption is called a curable disease, the great load is lifted off, and much more will be accomplished.

30. All cases of pretuberculosis ought to be cured; because here is a condition where there has been no destruction of tissue. This is where the exception to Section 28 comes in, if the practitioners will diagnose the condition, treat scientifically, and the patient obey orders.

31. Of all physicians who say these plans are foolishness, and who treat their cases by morphine, maltine and whiskey, we ask for publications of cases and the percentage of cures.

32. The ability to diagnose pretuberculosis by blood examination, often negatively points out the seat of trouble to be in the heart or uterus, or perhaps some other organ; also, cases of uterine disease complicated with tuberculosis should not be allowed to go untreated; but, in making examination, the physician must go over the whole field, and find out all of the disease. Some of the cases in this series, years ago, would have been benefited if their uterine disease had been treated, granted the cause is systemic, for bad food is an etiological factor of uterine diseases; while treating systemically, use all of the modern means to attack the local pelvic troubles.

33. If men complain, and say this dietary is too rigid, we will only reply that the cases have demanded it, and will be very thankful when consumption can be cured by more pleasant means than we have employed.

#### TREATMENT.

##### *Never prescribe raw beef.*

*Preparation of broiled chopped beef.*—Take beef from middle of the top of the round of well-fed cattle, who were not overdriven just before death. In the handling of these chronic cases too much care may not be observed in the selection of beef; life often hangs on the smallest detail.

Cut beef into cubes one inch by one inch by two or three inches. Free from fat and connective tissue by running it through the Enterprise chopper three times, each time cleaning the fibrous tissue from the plate at the distal end of machine; or use American chopper, which is noisy, but is the best. Touch with the hands the muscle pulp as little as possible, as the human animal heat changes the character of the meat. Mould into cakes one inch thick, and as many inches wide as needed. Broil over bed of live coals, charcoal the best; oil or gas can be used. The beef when done should be of a very dark color outside, and when opened present a reddish, but not raw, appearance. If the beef is rightly prepared it will be pleasant to the taste. The preparation must be done by a conscientious, intelligent, and humble individual: humble, because most cooks think they know everything about cooking, when commonly they know nothing; and the one who has the work of getting ready this beef and cooking it has a position whose influence for good or bad cannot be overestimated.

Serve on hot water plate, and season with pepper, salt, lemon juice, Worcestershire sauce, and in some cases butter.

*Drinks.*—Drink one pint of spring or distilled water, that has been raised to the boiling point, one hour before each meal and on retiring. Cool the water to a comfortable temperature, and drink slowly. Rest till meal time; also after meals. The amount of water may be increased or diminished, as the urinometer indicates. The urine must be at 1,015 to 1,020 specific gravity, free from odor, phosphates, bile, or deposit. Drink clear tea or coffee at meals.

*Baths.*—Take ammonia sponge bath, one drachm to a pint of water, night or morning; or nitric acid

baths, same proportion; or aromatic sulphuric acid baths, same proportion. Quinine and salicin may be given in bath per skin. The acid baths, and especially with alkaloids, are indicated in sweats.

*Exercise.*—Passive, by massage, so as to confer force; also passive by riding in carriage; also by riding on a walking horse. Do not wear people out with too much walking. Sick ones need their nerve forces for something else.

*Drugs.*—The rule may be laid down, *that the fewer drugs given by the stomach the better.* Yet cases come where there has to be the most careful exhibition of medicines. And at times these same cases will, after taking a great deal of medicine, improve almost immediately on stopping all drugs per stomach. The integrity of the stomach must be kept at all hazards. Treating these cases one learns how to wait.

*Tonics.*—Salicin, strychnia, pyrophosphate of iron, cinchona, and mixtures of the mild vegetable fluid extracts. English iodide of potash in small doses in asthmatic and rheumatic complications, and in syphilis. Biniodide of mercury 1-16 gr., an admirable cholagogue. Exsiccated sulphate of soda for constipation. Boneset, etc., etc. *Each case is a law unto itself.*

*In consumption, tumor, and cancer,* the closer patients adhere to a rigid diet of the chopped broiled beef the better they will do. Sometimes the stomach rebels; this it does when the beef is not right, despite the protestations of the butcher to the contrary. On finally pressing the point you will disclose that the beef has been kept too long.

Again, the stomach needs firm discipline; there is a hysterical element in some cases (the word hysteria has been poorly used), which must not be catered to, but at times roughly handled. Prof. Wm. Goodell tells of how he stopped a patient vomiting by giving her a most cruel scolding. The rule is this, that the closer the lines are drawn the better will the patient do. No man need expect to succeed treating chronic disease if he has to argue with his patients on the right or wrong of this procedure.

When the urine becomes normal, the blood in good order, the physician may bring in gradually some vegetable food, as toasted bread, boiled rice. It has been said we are too rigid; but, gentlemen, each case is a law unto itself, and you must feed accordingly.

THE ARISTON, Broadway and Fifty-fifth street, New York.

## THE WEST INDIES AS A SANITARIUM.

By WILLIAM F. HUTCHINSON, M.D.

I HAD intended, in closing my last chapter, to have spoken a few words upon the subject of clothing to be worn in the tropics and the amount of baggage to be taken.

In the first place, voyagers may place themselves entirely at ease in respect to custom-house authorities. All manner of courtesy is shown to tourists, and trunks or bags of any kind are rarely opened, officers going through the formula of chalking with the utmost rapidity and a pleasant smile.

In fact, at Martinique, the time occupied in passing my two trunks and two cameras was inside of sixty seconds; none of the packages were opened, and, with a courteous smile, the inspector said: "We never trouble the baggage of tourists, for there is no danger of their bringing anything here to cheat customs." And, the same being the case at all the other islands, there is no possible need to abstain from carrying as many

trunks as one wishes. On board ship they are swung down into the hold, no extra charge is made for their transportation, and, arriving at one or the other central points aimed at, a depot may be readily established, and small baggage taken thence in any direction.

It is difficult to estimate the value of one's own clothes when away from home. There is a sentiment of placid content in the mind of the traveler who has all the changes that he wants that goes far to make him happy, while the one who has come away with a couple of suits only, soon finds that he has made a mistake.

It is not here as in Europe, where every pound of baggage must be paid for extra, at a rate that speedily makes one's necessities cost more to transport than himself.

All due deference is paid to luggage in the British islands, and it is expected of the transportation lines that they should carry everything free.

It is a common thing to see a great boat-load of trunks going off on board a steamer of the Royal Mail, and to be told that these belong to a single passenger, when a casual observation would have convinced a looker-on that they were the entire baggage supply from a hotel. It is totally unnecessary to economize in this direction.

Under no circumstances, and I take the liberty to repeat this admonition, should anything but woollen underclothing be worn next the skin, and, bearing in mind the fact that West India washerwomen laundry their clothes by laying them on one rock and hammering them with another, it is as well to carry a supply sufficient for the trip, as I always do, or to purchase garments upon arriving, and to present them in fee simple to the laundress who comes to collect soiled linen.

The same rule holds good with gentlemen's flannels. There is no place in the West Indies where they can be cleansed as at home, and for this reason fancy tennis and yachting flannels are rarely seen among the natives, who content themselves with plain suits of blue or gray. Garments of white linen are rarely worn. It is a mistake to suppose that they are cooler. The expense of washing and repairing would be something enormous, they are quickly soiled, and not easily replaced.

Ladies in this climate rarely wear white, except at evening parties, or for morning wraps.

One begins by being surprised at the heavy clothing people wear down here, and end by putting on something of the same kind with exceeding joy, after an attack of lumbago caught by exposure to currents of air.

Serviceable flannel dresses for the day, cashmere gowns for breakfast, woollen or silk dresses for dinner, are what is needed. These, it is true, may be procured at a very reasonable price from native modistes, but they will rarely be satisfactory to the wearer anywhere away from the town where they are bought. It is better to take all that sort of thing along.

The same with shoes. The feet of the women of these countries are larger, on an average, than those of our own, and the ladies of my party found it a practical impossibility to reshoe themselves when their own boots had given out. Carry therefore plenty of boots.

In the French islands there are milliners who get up astonishing head-gear, some of the efforts made in Martinique being, as I was assured by a fair dame of our party, equal to anything she had seen in New York.



Do not take the trouble to bring umbrellas or sun-shades. They may be purchased here in infinite variety, and at a price far below those at home. Everybody carries an umbrella, either for sun or rain, and no one is disappointed in not finding a use for them.

With this dissertation on the clothes that one has to wear and needs to carry, we will fancy the long and tedious voyage at an end, and the islands of Saba and St. Eustatius in sight.

Over Little Saba, often called "Napoleon's Cocked Hat," from its singular resemblance to that article of apparel, hung soft fleecy clouds, which presently saluted us with sharp rain gusts and in a moment shone out bright again.

No one seemed to know much about these islands, and I was glad, a little later, to get hold of a book about them, and meet a gentleman who had recently been there.

Saba's little colony of two thousand or more poor negroes live like sea birds in an eyrie, away upon the volcanic peak that climbs a thousand feet farther towards the sky. There they spend their idle lives, raising a few vegetables, and occasionally building a boat for fishing purposes.

Once in a way, there is diversion afforded them, for their mountain home has a habit of occasionally exploding; the last eruption, in 1869, having been severe enough to shake up the people of St. Thomas, fifty miles away, in an energetic manner, but without making any particular impression upon their own minds.

I heard also that this gentleman had been exported from Holland to Saba to get well of chronic bronchitis, and that he preferred the bronchitis to the cure.

As there is neither an hotel nor a boarding-house, nor much of anything else on the island, there is little to buy, and it is useless for tourists' purposes.

Only a little way, however, across a sea of absolutely tranquil blue, the mountain peaks of St. Kitts assume form against the sky. Above the rugged cliffs of Mount Misery dark clouds of smoke hung thick, with here and there a vision of flame, as the crater below talked to us.

From beneath the clouds to the very water's edge stretched down the fields of sugar-cane in softest, sweetest tints of living green, divided into fields by mere difference of color. Of all rapid thorough cures for sea-sickness commend me to pictures like these. Not one of the growlers who had been so troublesome all the way out, remained; every one was joyful, well and happy, and exclamations of delight were heard on every hand, with expressions of thankfulness that they had come.

Along the sloping hill-side, excellent roads shone white among the green. Here and there tall chimneys marked sugar estates, and deep gulleys in mountain sides told of furious floods in rainy times.

At last we came in sight of Basseterre, chief town and capital of the island, whose population is some thirty thousand souls, the island, not the city. Like all tropical towns, it is prettiest from the sea, if I except the well-kept public square and the garden around the church, which are singularly attractive to eyes dimmed to out-door beauties by long northern winters.

There, in February, Marechal Niel and Jacqueminot roses were blooming in open air in serene unconsciousness of frost and snow that was good to see, and in the park avenues, tall palms with graceful waving fronds of deepest green, and long lines of mango-trees, just then in full bloom, gave no hint of winter near.

The temperature was simply perfect; neither too hot nor too cold. It was a fitting environment to the natural graces of the beautiful island we were on.

The most thorough searcher for curios failed to find anything to buy, with the exception of a few specimens of tropical fruits, and the shops, to people who had just left Broadway, were scarcely worth mentioning; but to our sea-weary passengers it was Eden, and their ecstasies over the beautiful flowers and trees recalled some early experiences of my own when the tropics were new to me too.

Hotels there are none worthy of mention; but the government has made an offer of seven thousand pounds sterling to build one, and will purchase a suitable tract of land within a short time. The report from the present place that they call a hotel, of a gentleman who stayed there a week, is anything but encouraging. He says that the proprietor has a den opening out of the dining-room, in the door of which he makes his appearance in an inebriated condition at meal-time and berates the boarders; and they have tough chicken and fish, and nothing else, for twenty-one meals a week. They do seem to need a new hotel at St. Kitts.

Dr. Wm. J. Branch, who is the chief medical officer of St. Kitts, was courteous enough to give me the following information:

Average barometer range, thirty degrees, with low tide at 4 P.M.

During the hurricane months, which are August, September, and October, there is always more or less danger of cyclones, of which, in his experience of twenty-five years, there have been but two.

Average yearly temperature is 80° F., the hottest being in September, when the range of the month is 92°, and the coldest in January, when in the morning it averages 69°.

The average rainfall is sixty-two inches, being largely confined to the rainy season, which comprises the three months before mentioned. During this time the trade winds cease to blow, and rain falls, not continuously, but in frequent sharp showers. This is also the sickly season, prevalent diseases being diarrhoea and dysentery.

In all, to a population of thirty thousand, there are seven medical men, all of whom must have British qualifications; but, while it is essential that these qualifications should be held by any one before he can receive a government appointment, there would be no objection to any person holding a really good American degree practising in the island, as he would be backed up by the profession.

It should be borne in mind, in calculating the ratio of doctors to the people, that by far the greater number of the latter are poor blacks, who can afford to pay little or nothing, and it is therefore almost necessary that government appointments should be held, in order that the practitioner may live.

Fees are one dollar, each visit, within a mile, with a dollar mileage.

For obstetric cases, twenty-five dollars, including one month's attendance.

Surgical operations will vary as elsewhere, excepting that operative midwifery is fifty dollars. For surgery ether is almost always used, having taken the place of chloroform of late years.

There are no suits for malpractice. In the list of births and deaths, we find among the former for the quarter ending September 30, 1889, a total of births of three hundred and twenty-four, of which one hundred and seventy-five were illegitimate. It would not be fair, however, to permit this immense proportion

of illegitimate births to go out without some explanation. The fact is that, among a population with so large a proportion of blacks, the standard of morality is invariably low, and when, in the official report to his government, the chief medical officer finds it necessary to say, as he did on the 15th of March, 1884, that the polyandrous and polygamous system prevails almost universally amongst the peasantry at these islands, active prostitution is largely carried on in Basseterre, and the system of free love circulates among the peasantry, there can be, I think, no more striking commentary upon the condition of sexual matters made, and no further reason needed.

There is an excellent hospital, named for a former governor, Cunningham. It has one hundred and thirty beds, of which fifty are surgical, with well-ventilated, cleanly wards, furnished with neat iron bedsteads, and there is every evidence in and about it of careful and attentive supervision and skilful medical service.

One great drawback to the Cunningham Hospital is the mixed character of the institution. It is both a poor-house and a hospital, and this unfortunate mixture runs the death-rate up beyond its normal height. Again, it is a building for the reception of lepers, of whom I saw several therein; and these certainly deter other people who need hospital attention from going there. I trust that the time will soon come when throughout the West Indian islands sufferers from this loathsome disease will be isolated, and kept so. At present, among the most unpleasant sights are the ghastly apparitions of misery that meet one's eye, so full are the streets of sufferers from this awful malady.

There can be no doubt that the government—by which I mean the English Colonial Office—ought to provide such accommodations for its wretched subjects as will prevent any danger of the spread of this disease.

While I am upon this subject, leprosy, I feel inclined to ventilate modern opinions for and against the contagiousness of this disease.

I have before me an official inquiry made by the government of Trinidad into the condition of that island as affected by the disease, which presents features of the greatest interest. There is no doubt as to the fact that leprosy is increasing in the islands and decreasing in Norway, where simple precautions of isolation have procured a diminution of one-half the number of lepers in thirty-three years. On the other hand, it is about the same number of years ago that the first case was introduced into the Sandwich Islands, and on a single one of them are crowded together nearly forty thousand sufferers.

Contagion or non-contagion of leprosy has been long a well fought subject, and there are strong arguments upon both sides; but the crowning fact that seems to end the matter is that, where segregation is practised, its victims steadily become fewer, all other things being equal, and, without it, as steadily increase.

Let us go back a little in our steps, and with just a few words we will take leave of St. Kitts. It has the honor of being the mother colony of the British West Indies, having been settled by Sir Thomas Warner in 1623.

Excellent water is brought from the hills five miles away, and there is plenty of it. There are beautiful drives, and equally attractive rides, the most popular being the drive and climb up Monkey Hill, a sharp elevation on the south end of the island, where was

once a strong fortification, whose ruins now are held by a garrison of apes.

Nevis goes fairly with St. Kitts, from which it is separated by a narrow arm of the sea, scarcely a mile wide. One should not leave St. Kitts without a visit to Nevis; for, beside the most wonderful hot spring and bath in the Windward Islands, there are the ruins of a once magnificent hotel, the birthplace of Alexander Hamilton, and a quaint old church in which I found the following record: "Married, March 17, 1783, Horatio Nelson, Esq., Captain of His Majesty's Ship 'Boreas,' and Frances Nesbitt, widow."

Besides all this, the visiting American, if he is as fortunate as I was, will meet cordial hospitality from Dr. Huggins and his charming Yankee wife.

So Nevis should by no means be neglected.

• ST. KITTS, MARCH, 1890.

## Society Notes.

### PHILADELPHIA COUNTY MEDICAL SOCIETY.

*Stated Meeting, September 24, 1890.*

THE VICE-PRESIDENT, JOHN B. ROBERTS, M.D., IN THE CHAIR.

RIB-FRACTURE FROM MUSCULAR ACTION, WITH FORTY COLLECTED CASES.

DR. JOSEPH P. TUNIS read a paper with the above title.

As fractured ribs form no inconsiderable part of those fractures which physicians are called upon to treat, some remarks on their rarer etiology may not be out of place. It is the object of this paper to report two recent cases where ribs were fractured, apparently from muscular action alone, and to collect together those which have already been published.

Different views have been expressed on the question whether a fracture can be caused, by muscular action alone, in bones not previously diseased. Some have positively denied such a possibility, as Richerand,<sup>1</sup> Vidal (de Cassis),<sup>2</sup> and Hornidge.<sup>3</sup> Others maintain a non-committal silence, as Petit,<sup>4</sup> Duverney,<sup>5</sup> Monteggia,<sup>6</sup> Desault,<sup>7</sup> and Bryant.<sup>8</sup> But the majority of surgical writers admit the possibility of such fracture, as Samuel Cooper,<sup>9</sup> Nélaton,<sup>10</sup> Malgaigne,<sup>11</sup> Purch,<sup>12</sup> Gurlt,<sup>13</sup> Follin,<sup>14</sup> Marchaud,<sup>15</sup> Erich-

<sup>1</sup> Nosographic Chirurgicale. Paris, 1815, tome iii, p. 13.

<sup>2</sup> Traité de Pathologie ext., 2d ed., tome ii, p. 215.

<sup>3</sup> Holmes' System of Surgery, Amer. ed., 1881. Art. "Fracture." Vol. i, p. 481.

<sup>4</sup> Traité des Maladies des Os. 3d ed., 1736, tome ii, p. 11.

<sup>5</sup> Traité des Maladies des Os (publié par Sénac), 1751, tome i, p. 15.

<sup>6</sup> Instit. Chir., Part II, 1803.

<sup>7</sup> Œuvres Chirurgicales, 1798 (publié par. X. Bichat), tome ii, p. 320.

<sup>8</sup> Bryant's Surgery, Amer. ed., 1873, p. 828.

<sup>9</sup> Cooper's Surgical Dictionary, S. A. Lane's ed., 1861, vol. i, p. 683.

<sup>10</sup> Pathologie Chirurgicale. Paris, 1844, tome i, p. 635.

<sup>11</sup> Treatise on Fractures, trans. by Packard, 1859, p. 38.

<sup>12</sup> Des Fract. de Claviculi par Action Musculaire. Ann. Cliniques de Montpellier, par A. Alquin, No. 4, Avril, 1857.

<sup>13</sup> Handbüch der Kurckenbrucken, Berlin, 1862, vol. i, pp. 228-254.

<sup>14</sup> Follin et Duplay: Traité class. de Pathologie externe, 1875, tome ii, p. 748.

<sup>15</sup> Dict. Encyclop. des Sci. Méd., Art. "Fractures" (Pathologie Chirurgicale). Paris, 1881, vol. iv, p. 17.



sen,<sup>1</sup> Agnew,<sup>2</sup> Ashhurst,<sup>3</sup> Hamilton,<sup>4</sup> Gross,<sup>5</sup> Packard,<sup>6</sup> Stimson,<sup>7</sup> and others. We have the best authority, therefore, for believing that bones have been and will be fractured by muscular action alone, even in persons of good constitution. The elder Gross writes: "A diseased state of the bone is not at all necessary to the production of this accident."<sup>8</sup> Gurlt,<sup>9</sup> having collected a large number of the so-called "spontaneous fractures," confirms this view. Simon Paul,<sup>10</sup> also, and Professor Stimson in a recent *Treatise on Fractures*.

Moreover, in certain<sup>11</sup> instances where an autopsy was possible from some extraneous cause, a careful examination of the bones has demonstrated their healthy condition.

Of the one hundred and thirty-three cases collected by Gurlt, the majority had some condition present which rendered them more easily broken. Any condition which lowers the normal consistency and resistance of the bone structure must predispose to fracture, as osteomalacia,<sup>12</sup> rickets,<sup>13</sup> cancer,<sup>14</sup> syphilis,<sup>15</sup> scrofula,<sup>16</sup> advanced age (*i. e.*, over fifty),<sup>17</sup> or atrophy from continuous confinement,<sup>18</sup> etc. "In short, all diseases dependent upon cachexia more or less predispose to the occurrence of fracture," says Hamilton.<sup>19</sup> When some such cause is present the existence of a fracture from muscular action can be more readily accounted for. There are, however, numerous cases on record where such accidents have occurred in healthy individuals, the determining cause of fracture being muscular action, and the mechanism varying with the anatomy of the bone affected. If these conditions are true for other bones, why may they not be equally true for the ribs?

The ribs offer three factors favorable to fracture: *First*, by their shape, being long, thin bones; *second*, by their position, firmly attached at the vertebral, and more or less free to move at the sternal end, and *third*, by reason of the powerful muscles attached to their bodies. They are "elastic arches,"<sup>20</sup> it is true, and capable of considerable movement. But their elasticity has its limit, and their movement is dependent entirely upon the muscles attached to them. Of these muscles the diaphragm appears to be the most favorably situated to produce rib-fracture. Centrally attached by its crura and ligaments to the vertebral column, it is connected at its circumference "on either side, to the inner surface of the cartilages and bony portions of the *six or seven inferior ribs* interdigitating with the transversalis."<sup>21</sup> Take, for example, the ninth rib. If the diaphragm should contract it would draw the anterior third of this bone toward the vertebral column, the other two-

thirds being held more or less firmly *in situ* by the serratus magnus, attached posteriorly, the internal oblique, the transversalis, and the intercostals. This contraction of the diaphragm continuing, if sufficiently powerful, would fracture the bone like a bent bow at the point of least resistance. Where the attachment of the serratus magnus left off, would seem a favorable seat for such a fracture. Has the diaphragm sufficient force to accomplish this? It has sufficient force to free the throat or bronchi of irritating material, almost approximating the sternum and the vertebral column in dyspnoea, often demonstrating clearly its power in membranous croup. It can eject forcibly the contents of the stomach on occasion, or cause great distress, and even death, from obstinate hiccough. Well supplied with blood, exercised day and night, its actions uncontrolled, we may with some reason believe that, suddenly exerting all its force on three or four ribs, one or more may fracture. Certain it is that the ribs to which the diaphragm is attached are most frequently fractured (almost the only ones), and the circumstances which excite the action of that muscle are most often given as the exciting cause of the accident.

Above the sixth rib, other muscles enter into the mechanism of fracture. In the case which Dr. C. B. Nancrede<sup>1</sup> has reported, and in Dr. Bird's case,<sup>2</sup> where the second rib yielded under unusual muscular strain, the pectoralis minor seems to have been the most probable determining cause, as this muscle<sup>3</sup> is attached to the third, fourth, and fifth ribs, often to the second, and is inserted into the coracoid process of the scapula. If the scapula were firmly held in place by the powerful muscles attached to it, the pectoralis minor would be in a position to act with the advantage of leverage. This muscle, or the serratus magnus,<sup>4</sup> would draw the anterior third of the bone away from the vertebral column, directly opposite to the movement of the lower ribs under the action of the diaphragm. Thus the mechanism in the large majority of these cases may be reached. Some still remain which require a special explanation from the facts of the case.

Malgaigne<sup>5</sup> was the first to call attention to the possibility of rib-fracture from muscular action. He had collected eight examples (Nos. 1, 13, 14, 15, 34, 35, 36, and 37), of which he wrote: "I think it very probable that in all these cases the ribs had undergone more or less of the atrophic thinning of which I have before spoken; and that the fracture was induced by muscular action, which, in coughing, approximates the sternum and the spinal column, just as exterior pressure does." Paulet,<sup>6</sup> in his article "Ribs," of the *Encyclopædia*, gave six more examples (Nos. 2, 3, 4, 5, 17, and 18), and mentions five cases where the *costal cartilages* were ruptured by muscular violence.<sup>7</sup> Théophile Mazeille, in 1882, brought together twenty-four cases in tabular form.<sup>8</sup> Since then, so many additional cases have been reported that they number now at least forty.

The two recent cases here given have not been previously reported:

Mrs. D., fifty-two years old, in March, 1890, came to the Episcopal Hospital Dispensary, seeking relief

<sup>1</sup> Science and Art of Surgery, Amer. ed., 1869, p. 224.

<sup>2</sup> Principles and Practice of Surgery, 1st ed., vol. i, pp. 718 and 852.

<sup>3</sup> Principles and Practice of Surgery, 4th ed., 1885, p. 223.

<sup>4</sup> Fractures and Dislocations, 5th ed. Philadelphia, 1875,

p. 30.

<sup>5</sup> System of Surgery, ed. 1859, vol. ii, p. 104.

<sup>6</sup> International Encyclopædia of Surgery, 1884. "Causes

of Fracture." Vol. iv, p. 3.

<sup>7</sup> A Treatise on Fractures, 1885, p. 93.

<sup>8</sup> Ibid.

<sup>9</sup> Des Fractures Spontanées, 1886, Paris, pp. 12 and 13, etc.

<sup>10</sup> Herard (Case 2), L'Union Médicale, 1855, p. 459.

<sup>11</sup> Principles and Practice of Surgery, Ashhurst, 4th ed.,

1885, p. 224.

<sup>12</sup> M. Sappey, Traité d'Anat. Descriptive, 3d ed., 1876, tome

i, p. 66.

<sup>13</sup> Dict. Practical Surgery, Heath, 1886, Frag. Ossium, vol. i,

p. 573.

<sup>14</sup> Fractures and Dislocations, 5th ed., 1875, p. 29.

<sup>15</sup> Gray's Anatomy, Amer. ed., 1883, p. 220.

<sup>16</sup> Gray's Anatomy, new Amer. ed., 1883, p. 402.

<sup>1</sup> See Case 7, Class i.

<sup>2</sup> See Case 42, Class iii.

<sup>3</sup> Gray's Anatomy, p. 410.

<sup>4</sup> Ibid., p. 409.

<sup>5</sup> A Treatise on Fractures, translated by Packard, 1859, p. 348.

<sup>6</sup> Dict. Encycl. des Sc. Méd. Art. Côtes, p. 61. Paris, 1877.

<sup>7</sup> Ibid., p. 84.

<sup>8</sup> Thèses de l'Ecole, No. 263: "Des Fractures de Côtes par Action Musculaire." Paris, 1882, p. 45.

## CLASS I.—HEALTHY BONES.

No. of case.	Reporter.	Year.	Reference.	Sex	Age	Physical condition.	Exciting cause.	Position of patient.	Diagnosis, side, rib, and site.
1	R.J. Graves,	1833	Dublin Journ. Med. and Chem. Sci., vol. iii, p. 355. <sup>1</sup>	F.	47	Strong, vigorous, and muscular; with an attack of bronchitis.	Violent cough.	Unrecorded.	Left side; ninth or tenth; in anterior third.
2	Herard,	1855	L'Union Médicale, tome ix., No. iii, p. 447. <sup>2</sup>	F.	22	Seven months gone in pregnancy; bronchitis for six months.	Violent cough.	Unrecorded.	Left side; eleventh rib; middle third.
3	Piffard,	1860	Gaz. des Hôp., No. iii, p. 442.	M.	49	In excellent health, except for a tenacious cough.	Attack of coughing.	Standing leaning against a door.	Right side; eleventh rib; middle third.
4	De Groninger,	1861	Archiv der Heilkunde, vol. i, p. 473. <sup>3</sup>	M.	45	Strong, healthy laborer.	Effort to prevent falling.	While walking home.	Right side; seventh and eighth; middle third.
5	Podrazki,	1872	Oesterreich Zeitschrift für prakt. Heilkunde, No. 18.	M.	50	A vigorous man; a few drops of water in his larynx.	Coughing to prevent choking.	Eating his dinner.	Right side; tenth rib; middle third.
6	Podrazki,	1873	Oesterreich Zeitschrift für prakt. Heilkunde, No. 44, October.	F.	30	Woman of good constitution.	Sneezing.	Unrecorded.	Eleventh rib; anterior third.
7	C. B. Nancrede,	1874	Philadelphia Medical Times, No. 4, p. 535. <sup>4</sup>	M.	44	"A singularly healthy, vigorous man."	Straightening a scythe.	Standing bent over.	Right; second rib; 2½ inches from sternum.
8	Chenery,	1878	Boston Medical and Surgical Jour., vol. xviii, May. <sup>5</sup>	F.	23	Pregnant; had bronchitis; general condition good.	Coughing.	Unrecorded.	Right side; "lower fixed rib."
9	Brookhouse,	1879	The Lancet, London, No. i, p. 503. <sup>6</sup>	F.	36	Highly neurotic; in good health; nine months gone in pregnancy.	Coughing.	Sitting sideways in bed.	Left; sixth; 2 inches from angle.
10	Deanos,	1885	Bull. et Mém. de la Soc. Méd. des Hôp. de Paris, vol. ii, p. 311-312.	M.	30	Chronic bronchitis, asthma, and emphysema.	Coughing.	Unrecorded.	Left; ninth; in front of angle.
11	D. C. Hawley,	1890	Medical Standard, Chicago, vol. vii, No. 5, p. 135.	F.	31	Suffering from chills and fever.	Vomiting.	Resting upon her elbow in bed.	Right side; ninth rib; anterior third.
12	Edward Martin,	1890	Unpublished.	M.	28	Slender, healthy, muscular man.	Muscular strain.	Bent over lifting a heavy weight.	Left side; sixth rib; sternal angle.

<sup>1</sup> Also, Medical and Surgical Review, October, 1833; or Amer. Journ. Med. Sci., vol. xiii-xiv, No. 26, 1834, p. 658.

<sup>2</sup> Also, Med. Times and Gazette, vol. ii, 1860, p. 441 (a review).

<sup>3</sup> Also, Med. Times and Gazette, 1861, vol. i, p. 450.

<sup>4</sup> Also, Centralblatt für Chirurgie, 1874.

<sup>5</sup> Also, Med. Times and Gazette, 1878, No. 2, p. 88.

<sup>6</sup> Additional information secured from a personal letter.

## CASE II.—DISEASED BONES.

No. of cases.	Reporter.	Year.	Reference.	Sex	Age	Predisposing causes; physical conditions.	General condition.	Exciting cause.	Position of patient.	Diagnosis, side, rib, and site.
13	Nankevill,	1835	London Med. Gazette, vol. xvi, July.	F.	63	Advanced age, malnutrition, and chronic bronchitis.	Weak and emaciated.	Coughing.	Lying in bed.	Left; fifth and sixth; anterior third.
14	Nankevill,	1835	Ibid.; or Am. Journ. Med. Sci., vol. xvii-xviii, p. 520.	F.	59	Advanced age, malnutrition,	Much emaciated.	Coughing.	Unrecorded.	Left; tenth and middle third.
15	Berard,	1841	Lancette Francaise, 1841, No. 16.	F.	54	Suspected of syphilis, advanced age, and bad living.	Weak and emaciated.	Coughing.	Unrecorded.	Left; ninth, tenth, and eleventh; anterior third.
16	Maingault,	1852	E. L. Beylard, Du Rachitis, etc. Paris, 1852, p. 76-83.	F.	35	Osteomalacia or rickets and malhygiene.	Anæmic.	Coughing.	Unrecorded.	Three ribs.
17	Denonvilliers,	1853	L'Union Médicale, tome vii, No. 63, p. 238.	M.	55	Advanced age, pulmonary emphysema.	Emaciated.	Turning in bed.	Lying at full length.	Left; ninth; middle third.
18	F. Castella,	1861	Gaz. des Hôpitaux, No. 150, p. 599.	M.	39	Hereditary scrofula.	Strong looking.	Sneezing.	Seated at a bar.	Left; ninth; middle third.
19	Philip Miall,	1871	British Med. Journ., Jan. 1871, p. 8.	F.	53	Tuberculosis, advanced age, pregnancy (primipara).	Anæmic.	Coughing.	Unrecorded.	—; tenth; middle third.
20	Alexander,	1871	Ibid., p. 61.	F.	55	Advanced age, malnutrition, chronic bronchitis.	Weak.	Coughing.	Sitting at the fireside.	Left; eleventh; middle third.
21	Gillette,	1876	L'Union Médicale, No. 75, p. 1017.	M.	56	Tuberculosis and advanced age.	Third stage of phthisis.	Coughing.	Unrecorded.	Left; eleventh; middle third.
22	Despres,	1882	Gazette des Hôpitaux, 1882, No. 25.	F.	53	Advanced age, chronic bronchitis.	Fairly good.	Severe cough.	Lying in bed.	Left; eleventh; anterior third.
23	Doit,	1882	L'Union Médicale, Paris, 1882, xxxiii, 676.	M.	59	Advanced age, tuberculosis, and syphilis.	Good.	Violent cough.	Sitting at his tailoring.	Left; sixth; anterior third.
24	T. E. Underhill,	1884	London Lancet, 1884, vol. i, p. 1162.	M.	54	Great muscular development, advanced age.	Excellent.	Violent muscular action.	Erect, wifling a pick.	Left; sixth, seventh, and eighth; middle third.
25	H. C. Wyman,	1885	Journal American Med. Assoc., Chicago, No. 5, p. 512.	M.	72	Advanced age, bronchitis.	Good.	Sneezing.	Standing upright.	Right; eighth; near angle.
26	M. Desnos,	1885	Bull. et Mém. de la Soc. Médicale des Hôp. de Paris, ii, 310-317.	M.	66	Advanced age.	Chronic bronchitis.	Violent cough.	Sitting on a bench.	Left; eighth; middle third.
27	Antony,	1886	Bull. et Mém. Soc. des Hôp. de Paris, vol. iii, p. 247.	F.	63	Advanced age.	Chronic bronchitis.	Violent coughing.	Unrecorded.	Right; ninth; middle third.
28	Ladroitte,	1886	La France Médicale, No. 95, vol. ii, p. 1133-1135.	M.	56	Advanced age.	Excellent.	Unusual muscular action.	Standing.	Right; fifth, middle third.
29	C. Tisne,	1886	Ann. Méd. Chir. Franc. et Etrang., Paris, ii, 286-293.	M.	68	Advanced age.	Chronic bronchitis.	Coughing.	Unrecorded.	Eighth; at junction of middle and posterior third.
30	A. Kunos,	1886	Ann. Soc. de Méd. d'Anvers, xlvii, 383-386.	F.	66	Advanced age, small bones and large muscles.	Excellent.	Unusual muscular action.	Lying in bed.	Eighth or ninth; at junction of posterior and middle third.
31	S. A. Fisk,	1888	Boston Med. and Surg. Journ., No. 119, p. 325 (and a letter).	M.	32	Tuberculosis, diabetes insipidus, inflammatory rheumatism.	Vigorous looking.	Violent cough.	Seated sideways on a chair.	Right; tenth; middle third.
32	E. C. Masser,	1890	British Med. Journ., London, vol. i, p. 953.	M.	54	Advanced age, Bright's disease, bronchitis.	Feeble looking.	Coughing.	Unrecorded.	Left; eighth; middle third.
33	Tunis,	1890	Unpublished.	F.	52	Suspected congenital syphilis, advanced age.	Emaciated, underfed, and overworked.	Coughing.	Lying on a sofa on her right side.	Left; tenth; middle third.



for a hacking cough and severe pain in the left side. Her emaciated figure, gaunt features, and parchment-like pock-marked skin, gave evidence of long-continued, mal-hygiene and mal-nutrition. Her family and personal history were negative, but her broad, flat nose, with deep triangular markings running off from it, made us suspect inherited syphilis. For the last three years she had suffered from rheumatism, but could remember no other sickness. Three out of her four children died in childhood. She stated that eleven days previous to her coming to the hospital, while lying on her right side on a lounge, she was suddenly seized with a violent fit of coughing. While coughing she felt a severe knife-life pain in her left side, and at the same instant something snapped "like a little stick." Not thinking it possible that she could have fractured a rib in such a manner, a sedative cough mixture was prescribed, and she was directed how to apply a turpentine stupe.

She returned the next day unimproved, and complaining bitterly of the pain in her side. A thorough examination of the chest then showed positive signs of fracture, of the tenth rib on the left side, about its middle. Dr. H. C. Simes, Dr. George Boyd, Dr. W. R. Lincoln, Dr. F. Rudderow, and Dr. L. H. Adler, Jr., afterward confirmed the diagnosis. There was no evidence of any direct violence in this case, and the patient gave a very clear account of the accident. Her cough was due to an attack of bronchitis. Strapping the affected side brought immediate relief, and she was discharged cured in six weeks.

Dr. Edwin Martin has kindly furnished me with the particulars of the following case, which was treated recently at the University Hospital Dispensary:

*Fracture of Rib from Muscular Contraction.*—James C. H., aged twenty-eight (about), a slender-built, muscular man, of healthy parentage, by occupation a laborer. By lifting a heavy beam, together with several workmen, the weight was suddenly thrown entirely upon himself. He was stooping slightly forward at the time, with his fingers grasping the bottom of one end of a beam; he was subjected to a sudden, violent strain. He heard a distinct crack, and felt an acute pain in the left side, as though a knife had been thrust in. The pain was greatly aggravated by breathing or coughing, and he distinctly perceived a sense of grating on motion. On examination, the sixth rib was found fractured at its sternal angle. There was no deformity, no ecchymosis. The patient was strapped, and made an uninterrupted recovery. There was no history of unusual brittleness in the bones of himself or in any member of his family.

For convenience, the collected cases, forty in all, have been divided into three classes.

#### CLASS III.—CASES WITH INCOMPLETE RECORDS.

CASE. 34.—Benjamin Gooch (*Medical and Surgical Observations*; Appendix. London, 1767. p. 53) reports: A young man at the hospital at Port Mahon, suffered from necrosis of a rib, caused by a kick. When nearly recovered he fractured a rib on the opposite side, during a paroxysm of coughing. He was much emaciated. Four surgeons diagnosed a complete fracture.

CASE 35.—M. C. Broussais (*Jour. Hebdomad.*, October, 1835, p. 107), at the examination at Val-de-Grace, of a patient suffering from chronic pneumonia and hypertrophy of the heart, found on the fourth rib a tumor of the size of a pigeon's egg, not painful. A fracture was diagnosed.

CASE 36.—M. Christy, senior surgeon of the hospital at Port Mahon, assured Malgaigne that he knew a gentleman who had fractured a rib in a violent effort at coughing (*vide* B. Gooch), (or *Archiv Générales*, Paris, 1838, vol. ii., 3d series, p. 272).

CASE 37.—Monteggia (*Institutioni Chirurgicale*: "Fracture," par. 17 and 23, 1802) saw a man about fifty, who had fractured a rib while coughing. The sound produced at the moment of fracture was heard by all in the room.

CASE 38.—Hilton (*Lancet*, London, 1852, i. p. 143) mentions a man who fractured a rib by muscular contraction while mounting a spirited horse. He was treated for pleurisy at first without relief.

CASE 39.—T. Mazielle in his thesis quotes a case supplied him by Th. Angers: A hat seller, forty-one years old, was admitted to Hospital Tenon with fracture of two ribs, apparently from muscular effort. The patient fell forward while walking, and only his head and one hand touched the ground. Signs of fracture in posterior portion of middle of thorax. No marks of direct violence.

CASE 40.—F. D. Bird (*Australian Medical Jour.*, May, 1889, p. 195) reports a married woman, with negative history, who fractured her second rib on the left side, about one and a half inches from the costal cartilage, while lifting one side of a heavy chest.

*Deductions.*—1. Forty cases having been reported, we may reasonably expect to hear of others, perhaps see them ourselves.

2. Of these accidents, more than one-fourth have occurred in individuals of apparently sound constitutions.

3. The left side has been most often affected, and either the middle or anterior third of the rib the usual position of the fracture. Of forty-nine fractures only five have occurred about the sixth rib. The great majority have been among the lower six (omitting the twelfth).

#### Rib Affected.

Second rib . . . . .	2	Eighth rib . . . . .	7
Fourth " . . . . .	1	Ninth " . . . . .	7
Fifth " . . . . .	2	Tenth " . . . . .	6
Sixth " . . . . .	5	Eleventh rib . . . . .	7
Seventh " . . . . .	3	Unrecorded . . . . .	9

#### Side Affected.

Right side . . . . .	10
Left " . . . . .	19
Unrecorded . . . . .	11
Total . . . . .	40

4. The exciting causes have been; Coughing (twenty-five), muscular effort (eleven), sneezing (three), and vomiting (one). The determining cause has been the action of the muscles, unless thirty-four observers have been deceived by the testimony of patients who could gain nothing by such deceptions.

5. Herard reports the youngest example (Case 2) of this accident, a woman, twenty-two years old. No case has been published younger than this—no doubt on account of the great elasticity of the ribs in youth.

6. Of these forty cases, two died of some intercurrent affection. The remaining thirty-eight made a complete recovery in the usual time.

7. More men (twenty-two) have suffered than women (seventeen), and the average age has been forty-eight years.

The difficulty and doubts which have attended the diagnosis of many of these cases ought to disappear, as more and more examples of this accident are re-

ported. Already, by the consent of the majority of surgeons, and by the evidence of accumulated cases, the possibility of rib fracture from muscular action, even in persons of sound constitution, seems sufficiently proven.

*Discussion.*—DR. O. H. ALLIS: I have been both interested and instructed in the paper. I am interested in the fact that so many fractures of the ribs produced by muscular action have been reported by the speaker. I think there are no long bones, where fractures from muscular action are so infrequent. I think that fractures of the humerus from muscular action occur in the proportion of at least ten to one as compared with fracture of the rib. The reason of this is, I think, because the ribs are so greatly protected. I think that the reason the diaphragm does not fracture the ribs more frequently is because its fibres are all short. There is a central tendon which divides the muscle. If it arose at the back and extended to the front, fractures of the ribs would probably be more frequent.

The subject of muscular laceration would also be a good subject to investigate. We so often find an abscess; it may be in the abdominal walls, due to laceration of one of the abdominal muscles. We see the same thing in various parts of the body. The fact that all these fractures are low down would seem to indicate that the diaphragm had a great deal to do with them, and, possibly, that the abdominal muscles also acted with it.

#### RAILWAY SURGEONS' ASSOCIATION.

THE Pennsylvania Co. Railway Surgeons' Association held its annual meeting in the parlors of the Seventh Avenue Hotel, at Pittsburgh, Pa., on Tuesday, the 14th day of October, with a good attendance.

DR. J. J. BUCHANAN read a valuable paper on

#### WHEN TO AMPUTATE,

in which he limited his subject-matter solely to injuries (not disease), requiring amputation. He said that it is better to wait until shock subsides. That in case of fragments of limb below point of crushing, and still adhering, they should be immediately removed at seat of injury; ligate all bleeding vessels, and then wait until shock subsides before proceeding to amputate.

DRS. MURDOCK, RIDENOUR, and others doubted the propriety of this.

DRS. RIDENOUR, LARKIN, MOSAEL, and others favored immediate amputation, provided patient was not in a state of collapse, as in cases where a large joint—such as the knee—is involved in the injury, the shock will naturally become deeper the longer you wait.

S. S. THORN, M.D., of Toledo, reported a case of cerebral surgery, wherein a patient's life was saved by a resort to trephine, after weeks of suffering following a slight injury to head.

The retiring President, DR. J. B. MURDOCK, of Pittsburgh, Pa., delivered a fine valedictory on the benefits resulting to the railway surgeon from these meetings of the Association. He made the excellent point that each and every railroad surgeon should attend these meetings; that those who did not, belong either to that *dangerous* class who know too much, or else to the *sloth* and *sluggard*—both not good for their position.

The following officers were elected for the ensuing year: *President*, S. S. Thorn, M.D., of Toledo, O.; *Vice-President*, Dr. Milo, of Newcastle, Pa.; *Secre-*

*tary and Treasurer*, S. P. Post, of Canton, O.; *Executive Committee*, Dr. Larkin, of South Chicago, Ill.; Dr. A. W. Ridenour, of Massillon, O.; Dr. J. B. Murdock, of Pittsburgh, Pa.

Society adjourned to meet in Chicago in the third week in October, 1891.

#### TREATMENT OF CHRONIC BRIGHT'S DISEASE.—

In the Section for Internal Medicine, at the International Medical Congress of Berlin, the subject of the treatment of chronic Bright's disease was brought forward for discussion. Dr. Lépine, of Lyons, opened the discussion. The danger of a chronic nephritis being the insufficiency of the renal secretion, the principal indication is to overcome this insufficiency. But in favoring increased secretion of urine care must be taken not to put too much work on the already diseased kidneys. On the other hand, it is necessary to keep up the nutrition. We must nourish the patient and stimulate the secretion of urine without irritating the kidneys—two indications which seem to be opposed, but which can yet both be satisfied. In the matter of food, we must diminish the amount of albuminoids relatively to the hydrocarbons and fat, since the waste products of the latter are not excreted by the kidneys. Although it is theoretically somewhat too rich in albuminoids, nevertheless milk is the best food for the patient with kidney disease. It contains no waste materials, and all the nitrogenous substances are utilized in the economy; it is rich in fats, contains nothing which can irritate the renal epithelium, and finally is diuretic. But it is usually impossible to keep the patient on a pure milk diet, and it will be found necessary to supplement it with digestible vegetables, bread, farinaceous foods, etc. It is, above all, important to attend to the condition of the digestive functions, since when the digestion is poor many toxic principles are formed which will serve only to irritate the kidneys. Although albuminuria is a symptom of transudation and apparently independent of the amount of secretion, yet we do not know what the relation between the two is, and it is therefore prudent to restrict the patient in the use of eggs, and sometimes of fish, if these appear to increase the amount of albumin excreted. To favor diuresis we may have recourse to slightly alkaline mineral waters, which sometimes are sufficient for the purpose. But when the diminished secretion is accompanied by signs of cardiac weakness we must employ heart stimulants. In the first rank of these remedies the author placed crystallized digitalin. This should, however, be given with great caution, and only every other day or even at longer intervals, in order to insure its complete elimination. Caffeine, in doses of at least fifteen grains hypodermically, was sometimes of service. Strophanthus should not be given, since it had a tendency to irritate the kidneys. Iodide of potassium, which is a diuretic, is chiefly indicated when there is arterio-sclerosis. The author was opposed to the employment of vapor-baths in cases of dropsy, fearing uræmia, but he always advised rest in bed, by means of which an even temperature of the skin could be maintained. Of course it was necessary to avoid all exposure to cold and wet. Uræmia was what every patient with chronic Bright's disease had most to fear.—*Med. Record.*

DR. B. H. DIEHL, of 2151 Park avenue, Philadelphia, died October 17. He was a graduate of the Medico-Chirurgical College, and had been in practice but little more than a year.



# The Times and Register

*A Weekly Journal of Medicine and Surgery.*

New York and Philadelphia, Oct. 25, 1890.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

THE TIMES AND REGISTER,  
REPRESENTING THE  
PHILADELPHIA MEDICAL TIMES.  
THE MEDICAL REGISTER.  
THE POLYCLINIC.  
THE AMERICAN MEDICAL DIGEST.  
PUBLISHED UNDER THE AUSPICES OF THE  
AMERICAN MEDICAL PRESS ASSOCIATION,

Published by the MEDICAL PRESS Co., Limited.  
Address all communications to 1725 Arch Street, Philadelphia.

## DR. BARTHLOW'S RETIREMENT.

MUCH surprise was occasioned last week by the announcement that Dr. Roberts Bartholow had been requested by his colleagues to resign the chair of Materia Medica and Therapeutics in Jefferson Medical College. The reason for this step, it is intimated rather than distinctly stated, lies in a degree of mental aberration which is alleged to render Dr. Bartholow unfit for the position he occupies. This is indignantly denied by him, and the resolutions adopted at a meeting of the students affirm that his teaching is fully up to the standard of his previous efforts.

If it be true that Dr. Bartholow is failing, it is a kindness to retire him while there is still a chance that rest and quiet may restore him to health; and this is no less a kindness if the object is unconscious of the need for such treatment. But if, as Dr. Bartholow avers, this is simply an excuse to get rid of an undesirable associate, a great wrong has been done to him.

Under the present wretched system of organization, the teachers in unendowed medical colleges must be prepared each to "hold up his end,"—i. e., to sustain his share of the common burdens in the competition with rival institutions. If a lecturer grows old-fashioned, uninteresting, or cranky, so that students desert his class-rooms for those of more popular teachers, the stern law of the survival of the fittest demands that he give place to a better. By means of this dropping out of the least desirable member, the personnel of a faculty is sometimes completely changed in a few years. Individually it may be a hardship; but the world has no use for drones or weaklings, and the interests of the institution and of its students are best considered by this plan. Nobody rests contentedly on the laurels he has won, but a fresh competitor steps into his place. Young Absalom is always eager to push old David from his throne.

But if these are the reasons for a man's retirement, it is better that they should be stated, in justice to the man displaced. For a man may cease to be pop-

ular as a teacher, and yet be still very desirable as a practitioner; while nobody cares to entrust his life to a man who is demented.

Dr. Bartholow has for many years filled a large place in the public eye. In Cincinnati he made warm friends and bitter enemies. His book on Therapeutics gave him the reputation that brought him to Philadelphia. In this work he did a great service to the profession. Coming out at a time when therapeutic nihilism was prevalent, his confidence in his methods of treatment and the emphatic language in which he couched his assertions won a hearing for him at once. Here was a man who believed in drugs, who could utter and print an emphatic "will," instead of Flint's "perhaps." There was a vigor about his therapy that "took." He used knock-down arguments in combating disease, and his forty-grain doses of quinine sometimes won the battle, where a temporizing policy would have lost. To him disease was an entity, a personal enemy, and he had full faith in his own powers. He confidently promised "cures" of all sorts of ailments, and even in the most hopeless he found remedies of "great value" in their treatment. Pity that such bright anticipations were not always realized; but we have no doubt that the percentage of recoveries for a physician imbued with such faith is far greater than for one equally skilful whose views are pessimistic. Then, too, his views were helped wonderfully by his introduction to the profession of many drugs previously used only in irregular or domestic practice. Before deciding that his views were too sanguine, it was necessary to ascertain by trial the properties of the new agents he recommended. In this Dr. Bartholow conferred a great boon upon the profession. While but little of his work will find a permanent place in the field of practice, he has exerted the most powerful and the most beneficial influence upon therapeutics of any writer of this generation.

As successor to Dr. Bartholow, it is said that the choice has fallen upon Dr. Hobart Amory Hare. Dr. Hare is a young man in medicine, his diploma bearing the date of 1884. He has repeatedly distinguished himself as an essayist, winning honorable prizes in competition with writers from all parts of the world. His selection by the Leas to fill the place of Dr. Hays as editor of the *Medical News* showed the estimation in which he was held by that influential publishing house. Dr. Hare has just issued a work on Therapeutics, which is now in the hands of a reviewer of our staff. Whether he will be able to "hold up his end" in competition with his master, Dr. H. C. Wood, remains to be seen.

And this brings on another question, more important than that of the change in a faculty chair: How is Jefferson College, with a faculty of seven active men, going to organize a three years' graded course with over five hundred students? The University finds a corps three times as large necessary. The Medico-Chirurgical College, with only one hundred and twenty-five students and a faculty of sixteen, and a thoroughly capable and efficient corps of assistants, finds it a task of such difficulty that their energies are taxed to the utmost. Either Jefferson

must open her faculty by creating new chairs and thus dividing the work, or her professors are men of gigantic mental and physical strength.

## Annotations.

**M**ATTERS sometimes turn out quite differently from what the planner expects, as has been noted by many observers before and after Burns. India has been held up as the earthly paradise of female doctors; the sex and religion of males excluding them from the zenana. But now we are told that in the Lucknow hospital the female patients turn up their small noses at physicians of their own sex, and prefer to enter the wards presided over by men. It is true that these patients are usually of the lower castes; but human nature is the same in every station; and it is quite likely that the Ranee or Sultana will also prefer a male medical adviser, and find a way to secure his services, spite of caste or Koran.

**T**HE *Inquirer* proposes that in view of the certainty with which typhoid fever can be prevented from spreading, by disinfecting the excreta of typhoid patients, an association of citizens shall be formed to look after the disinfection of cases occurring along the Schuylkill river. By this means all danger of infection from that source could be obviated.

The idea is a good one, and could easily be carried out at an expense that would be trifling beside that of constructing an aqueduct from Trenton. But would it not be well to begin by enforcing such a system within the city, and thus prevent infection of our sewers? It is almost certain that typhoid fever could be stamped out by such disinfection, as certainly as small-pox is by vaccination. The scientific demonstration of this fact has now become sufficiently positive to warrant legislative action which would render the disinfection of typhoid excreta compulsory.

**I**N the *Journal of Dermatology* Dr. Luff describes some experiments made with a view of ascertaining the absorption of drugs from ointments made with vaseline, lard and lanoline as bases. The ointments were placed in sheep's bladders and suspended in distilled water, kept at a temperature of 98° F. The result showed that exosmosis of potassium iodide began most quickly from the vaseline, and not at all from lanoline. The same result ensued with carbolic acid. The wholly unwarranted conclusion is drawn that when absorption is desired, ointments should be made up with vaseline.

This is opposed to the results obtained by a series of trials at the Medico-Chirurgical Hospital. Ointments of atropine were prepared with lanoline, oleated lard, pure lard, vaseline and mollin. These were rubbed upon the skin of patients selected with a view to uniformity as to age, quantity of ointment used, etc. The trial showed that the lanoline ointment was most quickly followed by the symptoms of atropine—the dry throat and dilated pupil. Next came the oleated lard, while vaseline and mollin came last.

## THE "KREUTZER SONATA" AND RUSSIAN MORALITY.

**A** GOOD deal of the disgust excited by Tolstoi's "Kreutzer Sonata" would, no doubt, have been saved were the readers familiar with the state of

affairs in Russia. It is a fair inference that the author could not have written such a book unless the conditions in which he lived were very different from anything to be found in America. A writer in the *Fortnightly Review*<sup>1</sup> gives a glimpse of Russian life which goes far towards explaining the *raison d'être* of Tolstoi's book. We are forcibly reminded that the Slav is as yet an undeveloped member of the Aryan family; and the degree of truth in this statement may be estimated by tracing back the history of any sister race until the same condition is found. Indeed, the limits of history will be reached, in some cases, before such a degree of brutish sensuality is found to prevail. It has been said that in the middle ages a condition of universal priapism existed; but we have even here the evidences of a contrary sentiment prevailing, in the rise of chivalry, which carried the idea of personal purity to a height rarely equaled in modern times. The fierce viking shut out women altogether from his cities. The Syro-Greek, in the groves of Antioch, invested his sensuality with a poetic grace that still survives in history. Chastity characterized the German on his first appearance upon the world's stage. The debauchery of the Roman Empire was unparalleled; but what magnificent achievements of that race preceded and led up to it! The race that built up the most stupendous political fabric the world has ever seen was as terrible in its excesses as in its battles. Celtic immorality is a modern development; and among the Gaelic population of Scotland, Ireland and Wales, chastity is the rule, with rare exceptions. But to-day, in Russia, Pachmann says that "the district courts do not look upon adultery as a serious violation of conjugal rights." Lanin speaks of the "abyss that separates Russian notions of morality and decency from those that prevail in the West." A parish priest, writing in *Graschdanin*, says: "All their social relations are permeated with coarse, cruel, brutal egoism." So that Tolstoi's book, necessarily a sharpened dart, hurled with full strength, may serve to pierce the tough Russian cuticle and arouse the sensation of conscious guilt.

## RAILWAY SURGERY.

**T**HE relations of the railway surgeon to the traveling public are considered in a paper presented to the Association of Railway Surgeons by A. W. Ridenour, of Massillon, Ohio. In case of injury by accident, the author states that patients may be transported by rail, for considerable distances, as soon as the preliminary dressings have been made. The motion of the car acts as a stimulant to patients in shock; though the time of transportation should not exceed two hours, as fatigue is then manifested. He earnestly warns against the practice of unlimited stimulation. A little whiskey may be beneficial if carefully administered. Besides this, hot water or beef tea, externally or internally, will do more good.

All trainmen should receive instruction in "first aid to the injured." Amputations should receive the sanction of the patient and his friends. In case of injury to any part of the nervous system, the physician should be discreet in expressing any opinion. The results of such injury may be far-reaching, and slow to develop. Real injury will inevitably be followed by demonstrable tissue alterations. These cases should be watched for one or two years. He ridicules the idea of bacteria clinging to the furniture

<sup>1</sup> Literary Digest, October 18, 1890.



of a sleeping-car. All bedding is thoroughly cleansed and disinfected at the end of each trip. Some improvement could be made in the closets, which are generally open and expose the persons using them to drafts. In case of menstruating women, in winter, this might cause trouble; but by a simple improvement this could be obviated.

Without great care, filthy and undesirable persons may avail themselves of the privileges of the sleeping-car; but the officers generally prevent this. If not, thorough cleaning is universally enforced at the earliest possible moment. But one bed should be made up in a section, if possible; the ventilation should be above and below; the temperature should be maintained at 65° F., instead of 98°, as is the porter's preference; and the bed should be arranged with the feet towards the engine.

Dr. Ridenour's paper shows that he has given his subject much study; and the suggestions made could be adopted with benefit. There is no doubt that both health and comfort would be much enhanced were the upper berth to be done away with; but a serious objection would be found in the increased cost, as the car would then accommodate but half the present number. This, however, would be more apparent than real, as a sleeper is rarely more than half full; the swaying of the top berth being too much for any but a seasoned traveler. Sleeping-car officials, however, insist on making up the top berths, even when not occupied, unless the occupant of the lower berth pays for the section.

## Letters to the Editor.

### CARDIAC OSSIFICATION.

I WAS recently called to see the body of a man who had been found dead. From the appearance of the body I concluded that he had been dead about an hour, or possibly two hours. Being ordered by Coroner Franklin to make an autopsy I proceeded to do so, and found the contents of the abdominal cavity normal. On opening the chest I found numerous old pleuritic adhesions, and the heart was very much enlarged, of a yellowish color, and full of fluid blood. On removing the heart, and laying open its cavities, I found the left auricle encircled on the inner surface by a ring of ossification, three-fourths of an inch wide, and extending almost the entire distance around it. How the heart continued to function so long is a mystery. The cause of the cardiac hypertrophy was evidently aortic stenosis.

GEORGE EVANS READING, M.D.

WOODBURY, N. J.

## Book Notices.

ESSENTIALS OF PRACTICE OF MEDICINE. By HENRY MORRIS, M.D.; with an Appendix, on the Examination of Urine, by LAWRENCE WOLFF, M.D. Philadelphia: W. B. Saunders, 913 Walnut street, 1890. Cloth, pp. 368 and 66. Price, \$2.00.

A quiz compend, like all the rest on practice, about ten years behind the times. If a fair specimen is to be found in the chapter on muscular rheumatism, the teaching is neither sufficient nor correct.

SAUNDERS' POCKET MEDICAL LEXICON. By JOHN M. KEATING, M.D., and HENRY HAMILTON. Philadelphia: W. B. Saunders, 913 Walnut street, 1890. Cloth, pp. 280.

A really good, little, vest pocket lexicon, in much larger type than usual; but the paucity of words necessitated is largely made up by the good judgment shown in their selection.

## Pamphlets.

A Criticism of Willett's Operation for Talipes Calcaneus. By A. B. Judson, M.D. Reprinted from the *New York Medical Journal* for August 23, 1890.

Clinical Observations on Salpingitis. By Thomas A. Ashby, M.D., of Baltimore. Reprinted from the *Maryland Medical Journal*.

I. The Prevention of the Short Leg of Hip Disease. II. The After-Treatment of Hip Disease. By A. B. Judson, M.D., New York. Reprinted from the Transactions of the American Orthopedic Association, September, 1889.

## The Medical Digest.

NOMA FOLLOWING TYPHOID.—In the *Lehigh Valley Medical Magazine* Keim describes a fatal case of gangrene of the cheek following typhoid fever, in a boy aged nine years. This rare affection has been most frequently noticed as a sequel of measles.

### FOR CIRRHOSIS OF LIVER.—

R.—Hydrargyri bichlorid..... gr. j.  
Ammonii muriat..... ʒij.  
Syr. aurantii..... ʒj.  
Aquæ..... q. s. ad ʒijj.

M.—S. ʒj thrice daily.

—Satterthwaite, *Southern Med. Record*.

TRAUMATIC TETANUS.—Tancil (*Jour. Am. Med. Assn.*) reports the case of a boy with tetanus, following a wound of the foot. Recovery ensued under the use of quinine, bromidia and gelsemium. The physicians in attendance credited the cure largely to the bromidia, which was given in doses of a teaspoonful every one, two or more hours, as needed to control the paroxysms.

### FOR DIABETIC GINGIVITIS.—

R.—Acid. boric..... 25 grammes.  
Acid. carbolic..... 1 gramme.  
Thymolis..... 0.25 "  
Aquæ..... 1 liter.  
Misce, et adde:  
Sp. anisi..... 10 grammes.  
Sp. menthæ pip. .... 10 gtt.  
Alcohol..... 100 grammes.  
Cocci cacti..... q. s. ad colorando.

S. To be diluted with an equal bulk of water and used to rinse the mouth after meals.

—Dujardin-Beaumetz, *Therap. Gaz.*

ITCHING.—Bronson (*Med. Record*) thus summarizes a paper on the sensation of itching:

1. That there is a sense of contact independent of the sense of pselaphesia.
2. That this sense of contact is the sense disturbed in pruritus.
3. That it concerns primarily, simple cutaneous nerves or nerve-endings, situated superficially and probably in the epidermis.
4. That the disturbance in pruritus is of the nature of a dysæsthesia due to accumulated or obstructed nerve excitation with imperfect conduction of the generated force into correlated forms of nervous energy.
5. That scratching relieves itching by directing the excitation into freer channels of sensation, sometimes, especially when severe, substituting for the pruritus either painful or voluptuous sensations.
6. That the voluptuous sensations that may attend pruritus are a manifestation of a generalized aphrodisiac sense, representing a phase of common sensation that has its source in the sense of contact.

**OVARIOTOMY FOR THE CURE OF INSANITY.**—Pfaff (*Weekly Medical Review*) describes a case in which he removed the appendages, which were diseased, from a woman who was at the time in acute mania, caused, it was thought, by the ovarian disease. The results are given as follows: "Since this time, a period of four months, she has continued to discharge the ordinary duties of housewife, without any symptoms, so far as can be ascertained, of her former mental derangement; and I have just this week seen her family physician, who assures me that his patient has been entirely cured by the operation, and that her mental faculties are as bright, apparently, as they ever were."

#### FOR DIABETES.—

R.—Fel. bovis inspis.  
Quinina sulph. .... āā gr. xl.  
Ext. nucis vomicae ..... gr. vj.

M.—et in capsul. No. xx divide.

S. One before each meal.

R.—Ext. hyoscyami fl. .... ʒiij.  
Ext. damianæ fl. .... ʒvj.  
Potassi bicarb. .... gr. xl.  
Mucilaginis. .... ʒss.  
Aque ..... ʒiij.

M.—S. ʒj every three hours.

Restriction of the quantity of food is more essential than of its quality.

—Porter, *Southern Med. Record*.

**ADMINISTRATION OF CHLORALAMID.**—Much depends upon the proper administration of the new hypnotic, chloralamid, to obtain the full effect and satisfactory and beneficial results. The dose is from 15 to 60 grains, with an average dose of 30 grains. Chloralamid is soluble in about 20 parts of cold water, and in 1½ parts of alcohol.

An additional caution is necessary: *Never dissolve or dispense chloralamid in hot water or warm solutions, as the heated preparation decomposes.*

The best modes of administration are:

1. In a tablespoonful of whiskey or brandy.
2. In properly proportioned solutions with wine, spirits, or spirituous compounds.
3. In a small cup of cold water or cold tea.
4. In powder form, in wafers or cachets washed down with cold water.

**TOXIC EFFECT OF CALOMEL IN THE PRESENCE OF CHLORIDES OF THE ALKALIES.**—Adam (*Nouveaux Remèdes*) confirms the statements of such authorities as Moll, Hervé, Guibourt, Larocque, Jolly, and others to the effect that within the body calomel does not, to any appreciable extent, go into solution as sublimate. M. Mialhe's assertion that it does, and that the agent in effecting this is sodium chloride, is still current doctrine. Dr. Adam's experiments were made both in the absence and presence of organic matter; in either case only traces of mercury went into solution provided that there was not free access of air. In the presence of air a considerable quantity of mercury was dissolved. The author claims that within the body the access of air is practically nil. Besides experiments outside the body, others were made on the living animal which confirmed the above negative statement.—*Brit. Med. Journ.*

**SPINAL CONCUSSION.**—Dr. Watson intelligently discusses many of the problems which this series of experiments presents. We deem his conclusions of sufficient importance to present them in outline as follows:

1. Concussive accidents never produce pathological changes in the cord unless great force has been applied to the spine. These cases are generally complicated with vertebral fracture or dislocation, rupture or stretching of vertebral ligaments, or distant injuries so severe as to quickly prove fatal.

2. The symptoms develop immediately, and are rarely intensified by morbid changes in the cord; exceptions, fractures, dislocations, and slowly developing hemorrhage causing pressure on the cord.

3. It is very difficult to demonstrate stretching of vertebral ligaments on living subjects. The lesion is frequently overlooked on autopsy.

4. Injuries of the cord, with visceral injuries in addition, develop symptoms dependent on the existing complication. The termination of the case rests on the character of the traumatism.

5. Concussive force, though remotely applied, frequently results in the production of severe and even fatal traumatisms in various organs within the three trunk cavities.—*Med. Record*.

**BACILLARY PARTNERSHIPS.**—In the course of some experimental investigations on the relationship of micro-organisms with diseased conditions, Drs. Cornil and Babès have discovered that a certain affinity exists between particular species. In other words, the development of special varieties may be facilitated, or the reverse, by the presence or pre-existence of certain other varieties. In this way the occasional complication of an existing infectious disease by a second is not the result of mere chance, but is governed by some still undefined conditions of environment. In other instances this association of two or more species of micro-organisms is necessary to the evolution of the malady. This association is the rule in the infectious diseases of human beings, and it is often the secondary infection that determines the fatal issue. This partnership arrangement may take place between microbes belonging to more or less nearly related species, as in the case with the organisms of pneumonia and typhoid fever. Or there may be streptococci and bacilli together, as in diphtheria, or several varieties of streptococci, as in the infection of wounds. In fact, there is a large selection of these associations, some invariable, others frequent and a third category, in which the secondary infection is accidental. These facts may possibly throw some light on the rhythm and sequence of the symptoms in the infectious diseases.—*Med. Press*.

**CHLOROFORM.**—I will conclude by giving a series of "practical conclusions," derived from studies of the subject by experiment upon animals, which do agree with observations upon the human subject. And I consider it a matter of no slight congratulation that they were presented at the late International Congress by one of our countrymen, Professor H. C. Wood, in his address on anæsthesia. They have been lately published in nearly all the journals, but they will bear repeating. The closest examination fails to detect any flaw in them, or to find any point which is not supported and which cannot be substantiated by clinical records:

1. The use of any anæsthetic is attended with an appreciable risk, and no care will prevent an occasional loss of life.

2. Chloroform acts much more promptly and much more powerfully than ether, both upon the respiratory centres and upon the heart.

3. The action of chloroform is much more persistent and permanent than that of ether.



4. Chloroform is capable of causing death either by primarily arresting the respiration, or by primarily stopping the heart, but commonly (sometimes) both respiratory and cardiac functions are abolished at or about the same time.

5. Ether usually acts very much more powerfully upon the respiration than upon the circulation, but occasionally, and especially when the heart is feeble, ether is capable of acting as a cardiac paralyzant, and may produce death at a time when the respirations are fully maintained.

6. Chloroform kills, as near as can be made out, proportionately four or five times as frequently as does ether.—Reeve, *Medical News*.

EXAMINATION OF THE SPUTUM FOR TUBERCLE BACILLI.—Kühne, of Wiesbaden (*Centralbl. für Bakt. und Parasitenk.*), after referring to the fallacies and difficulties with which the search for tubercle bacilli in sputum from phthisical patients is surrounded, describes a new method of staining the bacilli. When it is difficult to spread out the sputum on a cover glass he uses a concentrated solution of borax, to which at least an equal quantity of sputum is added. The mixture is shaken up in a suitable glass or is worked up in a mortar, after which it is easily spread in a thin layer over the cover glass. Nummular sputa from cavities may be broken down by a watery solution of carbonate of ammonia; this has the advantage that it is partially volatilized as soon as the cover glass is heated, and what remains is broken up by the action of the acid. An equable layer on the cover glass being obtained, the albumen is coagulated by careful heating over a flame, after which the specimen is stained in Ziehl's fuchsin solution for five minutes, the color is completely removed with a 30 percent. solution of nitric or sulphuric acid, and the specimens are washed in water and dried. In order to obtain a contrast stain, two or three drops of a concentrated solution of picric acid in aniline oil may be added to a watch glass containing pure aniline oil; a drop of this, placed on the slide before the cover glass is lowered into position, gives a sufficient yellow contrast stain to cause the red tubercle bacilli to stand out very prominently. They may be examined with a magnifying power of  $\times 60$  to  $\times 100$ , and where they are in great number, as is the rule in "cavernous" sputa, they appear under still weaker magnifying power as particles of red dust on a yellow ground. To make a permanent preparation, Kühne recommends that the aniline oil be driven off by means of his hand blower, and that the specimen be mounted in Canada balsam. By this method the tubercle bacilli only are stained.

—*British Med. Journal*.

PANCREATIC DIGESTION IN MARASMUS.—Gillet has examined the activity of the pancreas removed during cold weather, shortly after death, from seven children. His results, as reported in the *Annals de la Polyclinique de Paris*, are worthy of note, though his cases are too few to allow any conclusion to be drawn.

1 and 2. Two of the children were twenty-four days old when they died of "congenital debility;" in both the action of the pancreatic extract on starch was very slight; and in the one case in which the emulsifying and proteolytic action was tested, both were very imperfect.

3. In a child, aged fifty-three days, who died of athrepsia and bilious diarrhoea, starch and casein were very slowly acted on, but oil was emulsified.

4. In a child, aged three months, who died of lenteric diarrhoea, there was no action on starch, casein, or oil.

5. In a child, aged eight months and a half, whose death was due to congenital debility, starch was reduced in ten minutes.

6. In a boy, aged twenty-two months and a half, who died of pulmonary tuberculosis, albumen was rapidly dissolved, but the action on starch was delayed and on oil was imperfect.

7. In a boy, aged three years and a half, who died of measles and diphtheria, starch was reduced in twenty minutes.

M. Gillet, as is right, refrains from stating any definite conclusions, but considers that these results tend to support previous observations as to the inactivity of the pancreas during the first months of life, and to show that in lenteric, and perhaps also in bilious diarrhoea, it loses its power of acting on starch and albumen, while this power is retained in such severe diseases as "tuberculosis, measles, and diphtheria." His experiments were carefully performed, and precautions were taken to render the fluids aseptic.

—*Brit. Med. Jour.*

INTESTINAL OBSTRUCTION.—Jessett (*Med. Press and Circular*) thus sums up a valuable article:

1. Obstruction of the intestines the result of constricting bands or volvulus are always met with either in the small intestine or the sigmoid flexure.

2. The most common cause of bands are old peritonitis, local or general, Meckel's or other diverticula may be the cause of constriction of the bowel by snaring or twisting.

3. The predisposing cause of volvulus consists in elongation of certain segments of the intestine, abnormal length of the mesentery, adhesions, or unequal peristaltic action.

4. The higher in the intestine the obstruction the more severe usually are the symptoms.

5. All cases of obstruction should be treated by early abdominal section, and if possible reduction of the constricted portion of the intestine by dividing of constricting bands or untwisting a volvulus, that is if the gentle insufflation of hydrogen gas fails to effect reduction.

6. In all cases where the intestine is very distended, it should be freely incised and its contents evacuated.

7. In all cases in which the constriction is irreducible lateral anastomosis by approximation discs should be practised so as to exclude permanently the seat of obstruction from active faecal circulation.

8. In cases where gangrene has taken place in the loop of constricted intestine, it should be excised, and the portion of intestine above and below the seat of constriction should be united by lateral anastomoses by approximative plates; the divided ends being invaginated into themselves.

9. All bands and diverticula should be removed when practicable at the time of the operation; in the case of volvulus, if the mesentery is abnormally long it should be shortened.

10. That enterostomy, or the formation of an artificial anus, should never be performed unless it is found to be absolutely impracticable to re-establish the continuity of the intestinal canal by dividing the constricting bands by enterorrhaphy or by means of lateral apposition as described.

CELLULOID has proved a failure as a material for artificial eyes.

## Medical News and Miscellany.

SCARLET fever is on the increase in London.

ALEPPO reports fifty deaths daily from cholera.

DIPHTHERIA is prevalent in Chester county, Pa.

DR. MCGONIGAL, of New York, gets twelve years' sentence.

TYPHOID fever has broken out at Oley, Berks county, Pa.

DR. CLINTON COOK, of Chicago, has mysteriously disappeared.

THE Dunning Insane Asylum, Illinois, is to be lighted by electricity.

SOME unknown disease is said to be killing the oysters in the Chesapeake.

LASSAR, the Secretary of the Tenth Congress, is said to have become insane.

DR. PAVY has built and furnished a gymnasium for the use of the students of Guy's Hospital.

DR. PALMER M. KERN, formerly of Bath, more recently of Denver, Col., has settled in Easton.

THE Miners' Hospital at Hazleton has not passed out of the hands of the Building Committee as yet.

DR. HENRY ECROYD, of Philadelphia, is to be married to Miss Ashbridge, October 30, at Downingtown.

THE opposition to the extension of the Insane Department, Philadelphia Hospital, appears to have evaporated.

THE new Hahnemann hospital in Philadelphia was dedicated October 21. It has accommodations for 125 patients.

THE Norristown Insane Asylum has now in its wards over 1,800 patients, whereas it is designed to accommodate 1,300.

AN English justice has gotten into trouble by sentencing a man to five days' imprisonment for meningitis, of which he died in prison.

THE Trustees of Jefferson Medical College have requested Professor Bartholow to take a six months' vacation for the benefit of his health.

DR. J. W. PARKER, of Denver, shot Dr. Dameron, a dentist, on October 16, and slightly injured him. Should have loaded his gun with pills.

DR. F. H. WINES, of the Illinois State Board of Charities, is in Chicago, and will investigate the insane asylum and infirmary, which badly need it.

A NEW eclectic college has been organized at Indianapolis by members of that school who do not harmonize with the management of the old college.

DR. S. SOLIS COHEN has returned to Philadelphia from Dartmouth Medical College, where he has been giving a course of lectures upon therapeutics.

A NIGHT SCHOOL, which is free except for the charges, opened October 21 at the Central Christian Church, Twelfth street above Wallace, Philadelphia.

DR. BROWN-SÉQUARD has left the consideration of the elixir question long enough to recur to his query: "Does man have two brains or one?" The scientist resolutely ignores a certain order of individuals who belong to neither of these two classes, but are regrettably common in certain sections of the country.—*Chicago News*.

TENNESSEE has now in force an Examining Board, modeled on that of New York, containing regulars, homœopaths, and eclectics, Hydropaths, vitalists, physio-medicals, and faith curists are not represented.

THAT wily man, Wile, is about to perpetrate on a long-suffering public a new medical journal, denominated *The Prescription*, and composed entirely of favorite formulas.

IT is said that the Marine Hospital Department contemplates having medical men attached to all United States Consulates, who will examine all persons desiring to emigrate to America, and ascertain their physical fitness.

IN San Francisco, Dr. Connelly has caused a young lady's arrest for "disturbing the peace." She lives on the floor above his office, and the ground of her offending is that, while she is an inveterate piano player, the physician denies that she is a musician.

CITY ELECTRICIAN BARRETT, of Chicago, has invented a means of working a draw-bridge by electricity. The main difficulty in the practical working of his plan is that as yet dynamos are not allowed to vote, while the owls and offs can be depended upon in the primaries.

A REMARKABLE feat is recorded in the *Chicago Daily News* in the way of safe-opening. The burglar cut one of his nails down until the sensitive pulp was exposed. This he pressed against the knob, and turned until he could feel the tumblers drop into their places. After an hour's experimenting the safe doors swung open, and the ingenious rascal was nabbed by waiting detectives.

A DEATH occurred at Plymouth, England, during the administration of methylene. The lungs were found much congested; ventricles dilated; cardiac tissues soft and pale; kidneys large and congested; liver contracted. Methylene is administered in the Plymouth hospital about four hundred times annually, and it has been five years since a death under anaesthesia occurred.

AT the Philadelphia County Medical Society, on Wednesday, October 22, 1890, by invitation of the Board of Directors, Dr. J. B. Mattison, of Brooklyn, N. Y., read a paper entitled *The Penal Status of Opium Habitues*. Dr. John Aulde exhibited instruments and appliances for the administration of oxygen; Dr. Wm. Williams exhibited apparatus for sterilizing instrument and dressings.

ORGANIZED CHARITY.—The regular monthly meeting of the Superintendents of the Society for Organizing Charity was held October 20, at 1705 Chestnut street, Dr. James W. Walk presiding. In the non-resident department sixty-four cases were disposed of; forty of these were sent to wayfarers lodges; eighteen did not report at lodges; six declined assistance offered; seven were referred to the St. George's Society, and two were granted transportation.

"LIQUID CRYSTALS."—A very remarkable paper has appeared in a recent number of *Wiedemann's Annalen*, on the subject of "Liquid Crystals." An industrious German chemist has, it appears, discovered some most curious organic liquids, drops of which, when examined in the microscope by polarized light, show definite axes of elasticity, just like crystals. That a liquid should possess an internal structure of this kind is one of the most remarkable of recent discoveries in the domain of molecular physics.—*Electrical Review*.



THE Governor of Sierra Leone is said to have reported that a number of American missionaries had died of tropical fever because, out of belief in the faith cure, they refused to avail themselves of medical treatment. The Governor further declared that "the climate of that country is not suited to those who trust to faith healing and ignore the means placed at their disposal by Providence for the relief of suffering humanity."

The report is probably untrue; but, if verified, it should be made a serious question by those whose funds support the foreign missions, whether any good is to be expected from sending abroad as missionaries men who are devoid of common sense.

**BLUE-GRASS ENDURANCE.**—Professor N. Shaler, in his ethnographic researches, sought the record of a body of troops whose ancestors had been for many generations upon American soil, and he found it in the First Brigade of Kentucky troops (Confederate). In *Scribner's* for November he says: "On May 7, 1864, this brigade, then in the army of General Joseph Johnston, marched out of Dalton 1,140 strong, at the beginning of the great retreat upon Atlanta before the army of Sherman. In the subsequent hundred days, or until September 1, the brigade was almost continuously in action or on the march. In this period the men of the command received 1,860 death or hospital wounds, the dead counted as wounds, and but one wound being counted for each visitation of the hospital. At the end of this time there were less than 50 men who had not been wounded during the hundred days. There were 240 men left for duty, and less than ten men deserted. A search into the history of war-like exploits has failed to show me any endurance of the worst trials of war surpassing this."

**INTERMENTS in Philadelphia, from October 11-18, 1890:**

CAUSES OF DEATH.		CAUSES OF DEATH.	
Adults.	Minors.	Adults.	Minors.
Abscess.....	2	Inflammation bronchi.....	5
Alcoholism.....	1	" bladder.....	1
Anaemia.....	1	" kidneys.....	3
Apoplexy.....	1	" heart.....	1
Bright's disease.....	11	" lungs.....	13
Cancer of uterus.....	1	" peritoneum.....	1
Casualties.....	5	" pleura.....	1
Congestion of the brain.....	2	" s. & bowels.....	2
" lungs.....	3	Inanition.....	6
Cholera infantum.....	5	Marasmus.....	17
Cirrhosis of the liver.....	4	Neuralgia of the heart.....	2
Consumption of the lungs.....	42	Old age.....	7
Convulsions.....	15	Paralysis.....	9
Croup.....	10	Poisoning, cor. sublimate.....	1
Cyanosis.....	3	Pyemia.....	1
Drowned.....	1	Rheumatism.....	1
Debility.....	6	Septicæmia.....	2
Diphtheria.....	1	Sore mouth.....	1
Disease of the brain.....	12	Softening of the brain.....	2
" heart.....	18	Suffocation.....	1
" kidneys.....	1	Suicide, hanging.....	1
Dysentery.....	3	Syphilis.....	1
Dropsy.....	1	Tetanus.....	1
Fever, malarial.....	1	Tumor, abdominal.....	1
" remittent.....	1	Ulceration of the bowels.....	1
" scarlet.....	4	" stomach.....	1
" typhoid.....	6	Uremia.....	2
Hemorrhage from uterus.....	1	Whooping-cough.....	2
Homicide.....	2	Total.....	172
Inflammation brain.....	2		149

SOME time ago, when the *Index* gave the circulation of a number of prominent medical journals, the weekly *TIMES AND REGISTER* was quoted from Geo. P. Rowell & Co.'s newspaper directory as having more than 2,000 subscribers. The editor of the journal feels that an injustice has been done; and inasmuch as, at the time of consolidation of the periodicals

constituting the now *TIMES AND REGISTER* the *Poly-clinic* had about 2,000, the *Medical Times* 1,500, the *Medical Register* 2,500, and the *American Medical Digest* 3,000, the circulation of the present publication must be somewhere in the neighborhood of 9,000, instead of the 2,000 given—for which mistake the *Index* craves pardon, although it seems as if the error lies at the door of the publishers of the *TIMES AND REGISTER*. If a certified statement of the actual circulation of that periodical had been sent to Messrs. Geo. P. Rowell & Co., in response to the letter asking it, there is no doubt but proper circulation rating would have been given in the American Newspaper Directory. The inference that the publishers of the Directory would not give a satisfactory rating because the *REGISTER* failed to take advertising space is not a just one.—*Med. Index.*

[This is quite probably correct. The reflection on Messrs. Rowell & Co. was made hastily, and should not have been printed.]

SINCE the opening of the New York Pasteur Institute, on February 18, 1890, up to October 15, 610 persons, bitten by dogs or cats, came to be treated. These patients may be divided in two categories:

1. For 480 of these persons it was demonstrated that the animals which attacked them were not mad. Consequently the patients were sent back after having had their wounds attended, during the proper length of time, when it was necessary. *Four hundred patients of this series were consulted or treated gratis.*

2. In 130 cases the antihydrophobic treatment was applied, hydrophobia having been demonstrated by veterinary examination of the animals which inflicted bites, or by the inoculation in the laboratory, and in many cases by the death of some other persons or animals bitten by the same dogs. *All these persons, are, to-day, enjoying good health. In 80 cases the patients received the treatment free of charge.*

The persons treated were:

64 from New York.	3 from Pennsylvania.	1 from Ohio.
12 " New Jersey.	2 " New Hampshire.	1 " Arizona.
12 " Massachusetts.	2 " Georgia.	1 " Iowa.
9 " Illinois.	2 " Texas.	1 " Nebraska.
8 " Connecticut.	1 " Maryland.	1 " Arkansas.
3 " Missouri.	1 " Maine.	1 " Louisiana.
3 " North Carolina.	1 " Kentucky.	1 " Ontario, (Can )

THE Easton Hospital has been incorporated, a Board of Trustees and of Lady Managers elected. They have purchased a property on Wolf street, between Sixth and Seventh streets, which is now in the hands of the carpenters making the necessary changes, and will soon be ready for patients. The following staff has been appointed: Consulting Physicians, Drs. Traill Green, J. S. Hunt, and Isaac Ott; Attending Physicians, Drs. Charles Collmar, E. W. Evans, and H. D. Michler.

—*Lehigh Valley Med. Magazine.*

**CHARITIES IN INDIANA.**—The most interesting paper read before the State conference of charities was by Alexander Johnson, secretary of the State Board of Charities.

"We have in Indiana," said he, "besides county poor asylums, forty-five institutions of various kinds for the care and training of dependent children. The total number of children in these institutions is 2,723, and of these 1,518 are boys and 1,205 are girls, and of the total about 1,900 are receiving support from taxation. The sick, deaf and dumb, crippled, and infants under two years of age are not included in this summary. The total cost of these institutions in round numbers is about \$175,000 annually. Comparing Indiana with other States we have one depen-

dent child in every 1,150 of population, New York one in every 300, Ohio one in every 837, California one in every 162, and Michigan one in every 7,000. The number seems to be increasing, for the homes are receiving children much more rapidly than they can find homes for them, although, with the exception of the Catholic orphanages, the placing-out plan is the one theoretically governing them.

"To this statement there are some marked exceptions. The Indianapolis Orphans' Asylum placed out last year a number exceeding fifty-five per cent. of its present population—not counting those returned to parents after temporary care. The Northern Indiana Orphans' Home placed out a number equal to two hundred per cent. of its present population."

—Chicago Daily News.

DR. WILLIAM A. EDWARDS, of San Diego, California, was married to Miss Frances L. Taft, on October 6. Dr. Edwards was one of a group of Philadelphia physicians, of a class far above the ordinary medical emigrant, driven to the West by premonitions of pulmonary disease. He, like Drs. Eskridge and the Haynes brothers, seems to have won the same high standing among his fellows of the Pacific slope that he enjoyed among the physicians of Philadelphia.

PATENTS, ETC., issued on medical subjects October 14, 1890:—

Catamenial-sack.....	G. Fuller.....	Gloversville, N. Y.
Dental tool.....	F. T. Van Woert.....	Brooklyn, N. Y.
Ear-trumpet.....	J. Boyd.....	St. Paul, Minn.
Insecticide.....	Giles & Brown.....	National City, Cal.
Obtaining meat-extracts.....	J. Van Ruymbeke.....	Chicago, Ill.
Optical measuring, nose-con-		
forming, and recording in-		
strument.....	D. V. Brown.....	Philadelphia, Pa.
Stethoscope.....	B. S. Boydstone.....	Clunette, Ind.
Truss.....	Miller & Bennett.....	Denver, Col.

#### TRADE-MARKS.

Ointment. (The word "Se-		
bolin").....	J. Adler.....	New York, N. Y.
Throat and Lung balsam.		
(The representation of an		
annular band, with its trans-		
verse scroll having the words		
"Bullock's Throat and Lung		
Balsam" printed on the an-		
nulus and scroll.).....	M. L. Bullock.....	Passaic, N. J.
Remedy for catarrh, etc. (The		
word "Dodds").....	Foster, Milburn &	
	Co.....	Buffalo, N. Y.
Medicine for indigestion,		
liver complaint, and analo-		
gous diseases. (An equilat-		
eral triangle formed by the		
proper names "W. E. Fogg,		
E. H. Fogg, Geo. A. Fogg").....	W. E. & E. H. Fogg	
	& Co.....	West Milan, N. H.
Carbonated mineral waters		
and ginger. (The words		
"Ginger Champagne").....	The Manitou Min-	
	eral Water Co.....	Manitou Springs, Col.
Disinfectant and insect de-		
stroyer. (The compound		
letter "KB").....	Kern Bros.....	Brooklyn, N. Y.
Toilet-Deodorant. (The word		
"Footline").....	B. V. Ludlam & Co.....	Swanton, O.
Remedy for coughs and colds.		
(The words "Crown Cough		
Cure," and the representa-		
tion of an imperial crown.).....	E. Lawall.....	Easton, Pa.
Cough and kidney cure. (The		
words "Reid's German").....	Sylvan Remedy Co.....	Peoria, Ill.
Remedy for rheumatism, gout		
and neuralgia. (The letter		
"S," with letters "Dr," in		
upper and letter "E" in		
the lower part of same.).....	E. Schnizler.....	Philadelphia, Pa.

#### LABELS.

"Cod Liver Oil with the Hy-		
phosphates of Lime and		
Soda").....	A. C. McBride.....	Charleston, S. C.
"Wm. J. Sliter's Celebrated		
Cancer Cure").....	Wm. J. Sliter.....	Harpersville, N. Y.
"Paul Leuschner's Pure Nor-		
wegian Cod Liver Oil").....	P. Leuschner.....	Detroit, Mich.
"Dr. Pearson's German Lung		
Tonic").....	J. D. Pearson.....	Sheridan, Ind.

CHARLES J. GOOCH, Patent Attorney.

LOCK BOX 76, WASHINGTON, D. C.

#### TO CONTRIBUTORS AND CORRESPONDENTS.

ALL articles to be published under the head of original matter must be contributed to this journal alone, to insure their acceptance; each article must be accompanied by a note stating the conditions under which the author desires its insertion, and whether he wishes any reprints of the same.

Letters and communications, whether intended for publication or not, must contain the writer's name and address, not necessarily for publication, however. Letters asking for information will be answered privately or through the columns of the journal, according to their nature and the wish of the writers.

The secretaries of the various medical societies will confer a favor by sending us the dates of meetings, orders of exercises, and other matters of special interest connected therewith. Notifications news, clippings, and marked newspaper items, relating to medical matters, personal, scientific, or public, will be thankfully received and published as space allows.

Address all communications to 1725 Arch Street.

#### Army, Navy & Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from October 3, 1890, to October 13, 1890.

BYRNE, CHARLES C., Lieutenant-Colonel and Surgeon, is relieved from duty as Attending Surgeon at the Soldiers' Home, near this city, and will report in person to the commanding officer, Fort Sam Houston, Texas, for duty at that station. Par. 8, S. O. 232, A. G. O., Washington, D. C., October 3, 1890.

By direction of the Secretary of War, Captain James A. Finley, Assistant-Surgeon, is relieved from duty at Fort Totten, N. Dak., and will report in person to the commanding officer, Jefferson Barracks, Mo., for duty at that station, relieving Captain William D. Crosby, Assistant-Surgeon. Captain Crosby, on being relieved by Captain Finley, will report in person to the commanding officer, Fort Pembina, N. Dak., for duty at that station. Par. 8, S. O. 232, A. G. O., Washington, D. C., October 3, 1890.

Leave of absence for one month is granted Lieutenant-Colonel Joseph C. Bailey, Assistant Medical Purveyor, Medical Director of the Department. S. O. 86, par. 3, Department of Texas, October 3, 1890.

By direction of the Secretary of War, the leave of absence granted First Lieutenant Leonard Wood, Assistant-Surgeon, in Special Orders No. 74, August 30, 1890, Department of California, is extended one month. S. O. 232, par. 7, A. G. O., Washington, D. C., October 3, 1890.

By direction of the Secretary of War, Major Henry M. Cronkhite, Surgeon, is relieved from duty at Fort Lewis, Colo., and will report in person to the commanding officer, Fort Trumbull, Conn., for duty at that station, relieving Captain Robert J. Gibson, Assistant-Surgeon. Captain Gibson, on being relieved from duty by Major Cronkhite, will report in person to the commanding officer, Fort Sam Houston, Texas, for duty at that station. Par. 8, S. O. 232, A. G. O., Washington, D. C., October 3, 1890.

By direction of the Secretary of War, Major William H. Gardner, Surgeon, is relieved from duty at Washington Barracks, D. C., to take effect on the arrival of Major Joseph K. Corson, Surgeon, and will report in person to the commanding officer, Angel Island, Cal., for duty at that station. Par. 8, S. O. 232, A. G. O., Washington, D. C., October 3, 1890.

By direction of the Secretary of War, Captain William E. Borden, Assistant-Surgeon, is relieved from duty at Fort Sam Houston, Texas, upon the arrival of Lieutenant-Colonel C. C. Byrne, Surgeon, and will report in person to the commanding officer, Fort Davis, Texas, for duty at that station, relieving Captain Peter R. Egan, Assistant-Surgeon. Captain Egan, on being relieved by Captain Borden, will report in person to the commanding officer, Fort Warren, Mass., for duty at that station, relieving Captain George McCreery, Assistant-Surgeon. Captain McCreery, on being relieved by Captain Egan, will report in person to the commanding officer, Fort Clark, Tex., for duty at that station, relieving Captain Charles M. Gandy, Assistant-Surgeon. Captain Gandy, on being relieved by Captain McCreery, will report in person to the commanding officer, Fort Shaw, Mont., for duty at that station. Par. 8, S. O. 232, A. G. O., Washington, D. C., October 3, 1890.

By direction of the Secretary of War, Major Curtis E. Munn, Surgeon, is relieved from duty at Angel Island, Cal., and will report in person to the commanding officer, Fort Monroe, Va., for duty at that station, relieving Major John Brooke, Surgeon. Major Brooke, on being relieved by Major Munn, will report in person to the commanding officer, Fort Leavenworth, Kansas, for duty at that station, relieving Major Alfred A. Woodhull, Surgeon. Major Woodhull, on being relieved by Major Brooke, will report in person to the commanding officer, Fort Sherman, Idaho, for duty at that station. Par. 8, S. O. 232, A. G. O., Washington, D. C., October 3, 1890.



# BUFFALO LITHIA WATER

IN BRIGHT'S DISEASE, OF THE KIDNEYS, THE GOUTY DIATHESIS, ETC., ETC.

DR. WM. A. HAMMOND, of Washington, D. C., Surgeon-General U. S. Army (retired), Professor of Diseases of the Mind and Nervous System in the University of New York, etc. :

"I have for some time made use of the BUFFALO LITHIA WATER in cases of AFFECTIONS of the NERVOUS SYSTEM, complicated with BRIGHT'S DISEASE OF THE KIDNEYS or with a GOUTY DIATHESIS. *The results have been eminently satisfactory.* Lithia has for many years been a favorite remedy with me in like cases, but the BUFFALO WATER CERTAINLY ACTS BETTER THAN ANY EXTEMPORANEOUS SOLUTION of the LITHIA SALTS, and is, moreover, better borne by the stomach. I also often prescribe it in those cases of CEREBRAL HYPERÆMIA resulting from OVER MENTAL WORK—in which the condition called NERVOUS DYSPEPSIA exists—and generally with MARKED BENEFIT."

HUNTER MCGUIRE, M.D., L.L.D., late Professor of Surgery, Medical College of Virginia, Richmond :

"BUFFALO LITHIA WATER, *Spring No. 2*, as an ALKALINE DIURETIC is invaluable. In URIC ACID GRAVEL, and, indeed, in diseases generally dependent upon a URIC ACID DIATHESIS, it is a remedy of EXTRAORDINARY POTENCY. I have prescribed it in cases of RHEUMATIC GOUT, which had resisted the ordinary remedies, with wonderfully good results. I HAVE USED IT ALSO IN MY OWN CASE, BEING A GREAT SUFFERER FROM THIS MALADY, AND HAVE DERIVED MORE BENEFIT FROM IT THAN FROM ANY OTHER REMEDY."

DR. HENRY M. WILSON, of Baltimore, Ex-President Medical and Chirurgical Faculty of Maryland.

"My experience in the use of the BUFFALO LITHIA WATER has not been large, but it is of such a positive character THAT I DO NOT HESITATE TO EXPRESS MY PREFERENCE FOR IT, AS A DIURETIC IN URINARY CALCULI, OVER ALL OTHER-WATERS THAT I HAVE EVER USED."

Water, in Cases of One Dozen Half-gallon Bottles, \$5.00, f. o. b. here.

**THOMAS F. GOODE, Proprietor, Buffalo Lithia Springs, Va.**



CH. MARCHAND'S

## Peroxide of Hydrogen,

MEDICINAL

(ABSOLUTELY HARMLESS)

(H<sub>2</sub>O<sub>2</sub>)

Is rapidly growing in favor with the medical profession. It is the most powerful antiseptic known, almost tasteless and odorless. Can be taken internally or applied externally with perfect safety. Its curative properties are positive, and its strength and purity can always be relied upon. This remedy is not a nostrum.

Experiments by Prof. Pasteur, Dr. Koch, and many other scientific authorities, prove beyond doubt that Germs, Bacteria, or Microbes cause and develop: NOSE, THROAT, and LUNG DISEASES—Diphtheria, Croup, Sore Throat, Catarrh of the Nose, Hay Fever, Bronchitis, Laryngitis, Pharyngitis, Whooping-cough, Consumption and other Chronic Affections, specific or not. GERMS, BACTERIA, or MICROBES are instantaneously annihilated when brought into contact with Ch. Marchand's Peroxide of Hydrogen. This wonderful bactericide acts both chemically and mechanically upon all excretions and secretions, so as to thoroughly change their character and reactions instantly. By destroying the microbial element this remedy removes the cause of the disease.

**CAUTION.**—I would earnestly impress upon the profession the very great importance of prescribing only my Peroxide of Hydrogen (Medicinal), from which all hurtful chemicals have been eliminated.

By specifying in your prescriptions "Ch. Marchand's Peroxide of Hydrogen (Medicinal)," which is sold only in ¼-lb., ½-lb., and 1-lb. bottles, bearing my label and signature, you will never be imposed upon.

## GLYCOZONE

Is used as an internal remedy or for local dressings. It is absolutely harmless; and Ozone is its healing agent.

Glycozone, by its wonderful antiseptic and healing properties, not only prevents the fermentation of the food in the stomach, but it quickly cures the inflammation or irritation of the mucous membrane. It is a specific for disorders of the stomach: Dyspepsia, Catarrh of the Stomach, of Gastritis, Ulcer of the Stomach, Heartburn.

Sold only in ¼-lb., ½-lb., and 1-lb. bottles, bearing CHAS. MARCHAND'S label and signature:

Prepared only by

*Charles Marchand*

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris" (France).

A book containing Price List and full explanation concerning the therapeutical application of both CH. MARCHAND'S PEROXIDE OF HYDROGEN (Medicinal) and GLYCOZONE, with opinions of the profession, will be mailed to physicians free of charge on application.

SOLD BY LEADING DRUGGISTS.

**LABORATORY, 10 WEST FOURTH STREET, NEW YORK.**

## Notes and Items.

**A FAULTLESS REPLY.**—Examiner (in Physics): "What happens when a light falls into the water at an angle of forty-five degrees?"

Pupil: "It goes out."—*Blatter and Bluthen.*

—**FAMILY physician** (to very cadaverous patient)—"H'm! Distress in your stomach and a pain in your back, eh? Well, I'll fix you up a plaster, and you can clap it on either in front or behind. The two pains are so near together that one plaster will do for both.

**WHO TO CONSULT.**—Doctor (to patient): "What ails you?"

Patient: "Indeed, I don't know. I only know that I suffer."

"What kind of life do you lead?"

"I work like an ox, I eat like a wolf, I am as tired as a dog, and I sleep like a horse."

"In that case I should advise you to consult a veterinary surgeon."—*From the French in Texas Siftings.*

**WHAT ATTRACTS MEN AND WHAT HOLDS THEM WHEN THEY ARE ATTRACTED.**—Often the things in women that attract men are possessions of doubtful value in any woman. What attracts a man is one thing; what will hold him and command his respect is quite another.

A woman's smile, for example, attracts a man; but an even temper retains him.

A pretty gown attracts a man; the knowledge that it was inexpensive delights him.

A pleasant manner attracts a man; brightness of brain holds him.

A knowledge of how, when and where to be a little stately attracts a man; and appreciation of the folly of frivolity wins his respect.

A respect for the religious belief of every human being attracts a man; irreverence in woman is to him abominable.

A consideration for his comfort attracts a man; a continuation of this makes him your most humble slave.

A chat in which there is no malice attracts a man; neither scandal nor evil-speaking makes a woman seem sweet and lovely to him.—*Ladies' Home Journal.*

IN a town in New Jersey there used to live a dentist whose name was Samson. As if to prove that there is something in a name, this Doctor Samson was a powerful man, and his mighty right arm never failed to bring with it whatever his forceps had fastened upon. "As strong as Samson" had a local significance in that town.

It happened, however, that Doctor Samson did not like references to the significance of his name. Like many other men whose names "mean something," he had heard these jokes until he was heartily tired of them.

One day a townsman came in who had a tooth to be pulled. The "patient" was a foppish, rattled-headed fellow, who tried to keep up his courage by putting on a jesting exterior.

"Now, doctor," he said, nervously, "I suppose you won't drag me around the room more than three times? Three times and then 'out,' you know."

"Are you afraid?" the dentist asked.

"Oh, no, not exactly, but it's a little alarming, don't you know, to have a Samson tugging away at your jaw."

"I suppose," said the dentist, looking a little sour, "that you are afraid I'm going on an expedition against the Philistines."

"Against what?"

"The Philistines, and so have use for the jaw-bone of an ass."

## GENOIS' DIASTASIC EXTRACT OF MALT

Is in use in nearly all the Hospitals, Asylums, and other Institutions of Philadelphia.

### Alcohol and Opium Cases.

Private Apartments in the homes of physicians (but one case in each) with every convenience, and all modern appliances for treatment. Strict privacy guaranteed. Skilled attendance. Address,

WILLIAM F. WAUGH, M. D.,  
1725 Arch St., Philadelphia, Pa.

### PRIVATE SANITARIUM,

For Medical and Surgical Treatment of Diseases of Women.

DR. E. E. MONTGOMERY,  
1818 Arch St., Phila.

## GOUDRON DE BLOUNT

PREPARED FROM THE GENUINE CAROLINA TAR.

**DOSE.**—One fluid drachm four or more times a day, (as indicated) either full strength, diluted, or, in combination.

**INDICATIONS.**—Chronic and acute affections of the Air Passages, Coughs, Colds, Bronchitis, Asthma and Consumption.

**WILLIAM MURRELL, M.D., F.R.C.P.,**

Lecturer on Pharmacology and Therapeutics at the Westminster Hospital; Examiner in Materia Medica to the Royal College of Physicians of London; Fellow of the Medical-Chirurgical College of Philadelphia.

Says:—"I have used with success 'Goudron de Blount.' The results have been good, and the preparation is popular with patients."

PREPARED EXCLUSIVELY FOR PHYSICIANS' PRESCRIPTIONS BY

**R. E. BLOUNT, 23 RUE ST. ROCH, PARIS.**

WHOLESALE AGENTS FOR  
UNITED STATES AND CANADA.

Clinical Notes sent on Application.

**BATTLE & CO.,**

CHEMISTS' CORPORATION,

ST. LOUIS, MO.

*Dr. Knorr's*

## ANTIPYRINE.

SOLUBLE IN COLD WATER.

DR. GERMAIN SÉE, PARIS, Prefers ANTIPYRINE to Morphine in Hypodermic Injections, to relieve pain.

The Academy of Medicines, Paris, in their especially published pamphlet, December 17, 1889, say repeatedly: The effects of ANTIPYRINE in treating INFLUENZA are wonderful.

The best known of all modern antipyretics; has a world-wide reputation.

Antipyrine reduces temperature quickly, safely, and without any secondary effects.

Recommended in Diseases of Childhood, Typhoid Fever, Erysipelas, Acute Rheumatism, Phthisis, HEADACHE, MIGRAINE, Hay Fever, Asthma, Seasickness, WHOOPING-COUGH, DIABETES.

**J. MOVIUS & SON, New York,**

Successors to LUTZ & MOVIUS.

SOLE LICENSEES FOR THE UNITED STATES OF AMERICA.



## JOHN CONDON &amp; CO.,

MERCHANT TAILORS,  
810 CHESTNUT ST.,

PHILADELPHIA.

## ENGLISH HOPSACQUES

IN ALL COLORS, THE

Latest and Newest Novelties

FOR

FALL AND WINTER.

## The Seaside Sanitarium

ATLANTIC CITY, N. J.,

—WILL OPEN—

About November 1, 1890.

This Sanitarium is for the treatment and cure of persons suffering from nervous affections; it has all the modern conveniences and good sanitary arrangements.

It is open all the year, is well heated, well ventilated, and with abundance of sun-light. Cases of nervous prostration and convalescents can here find all the attention, comforts and attractions of a home, with constant professional supervision; free from restraint and with care and skilful nursing by thoroughly trained nurses that cannot but produce the best results.

The apartments are cheerful and well furnished, and each patient has a private room and quiet seclusion.

No infectious diseases are received, and the number of cases is limited.

The surroundings are attractive and the grounds handsomely laid out, with varied views and walks, offering a pleasant and healthful resort free from malaria.

It is quite near the ocean, and located in the most quiet part of the city, far from the excursion houses.

Good nurses; good cooking; and the best climate, summer and winter, on the Atlantic coast.

R. S. WHARTON, M. D., Manager.

GENUINE IMPORTED  
NATURAL

## Carlsbad Sprudel Salt

AND

## CARLSBAD MINERAL WATERS

ARE HIGHLY RECOMMENDED FOR

1. **Diseases of the Stomach**—Chronic Catarrh of the Stomach, Cardialgia, Ulcer of the Stomach
2. **Diseases of the Intestines**—Chronic Constipation, Chronic Diarrhœa.
3. **Diseases of the Spleen**—Chronic hyperæmia of the spleen, tumors of the spleen, arising after intermittent fever, typhus, etc., and the effects of a residence in marshy districts or hot climates.
4. **Liver Diseases**—Hyperæmia of the Liver, resulting from agglomeration of the blood in the veins, if it does not originate in organic defects; fat liver, jaundice, produced by catarrh of the passages of the bile, or by liver complaint in consequence of violent emotions; Gallstones.
5. **Diseases of the Kidneys and Bladder**—Gravel, nephritic stones, sand, stone in the bladder—chronic catarrh of the kidneys and bladder—Albuminuria.
6. **Diseases of the Prostate**—Chronic hyperæmia of the Prostate, resulting from interrupted circulation of the bowels, constipation, hemorrhoids, etc.
7. **Chronic Catarrh of the Womb**—produced by menstrual disturbances, hemorrhoids, and the different consequences of interrupted circulation in the bowels.
8. **Gout**—especially in its early stages.
9. **Diabetes Mellitus**—By the use of the Carlsbad Thermal Waters, not only the clinical phenomena of this disease (the tormenting thirst, violent hunger, dryness of the skin) disappear in a very short time, but it also considerably diminishes the secretion of sugar in the urine, and frequently causes it to disappear altogether.

Diseases of the Stomach are generally best treated with the Carlsbad Water, whereas the Carlsbad Sprudel Salt (powder form) is to be preferred in diseases of the other viscera, such as intestinal canal, spleen, kidneys, in adiposis, etc.

PAMPHLETS MAILED ON APPLICATION.

EISNER &amp; MENDELSON CO.,

SOLE AGENTS

6 BARCLAY STREET \* \* \* \* \* NEW YORK.



The genuine imported Carlsbad Sprudel Salt is put up in round bottles like the above cut. Each bottle comes in a paper carton with the seal of the City of Carlsbad, and the signature of "EISNER & MENDELSON CO." Sole Agents, on the neck of every bottle and on the outside carton.

# MORPHO-MANIA.



"I consider the preparation known as **BROMIDIA** an excellent remedy, far superior in its action to Bromide alone, and exceedingly useful in combating Insomnia.

"I will give you a few particulars concerning the happy effect of **BROMIDIA** which I think should be recommended in all such cases.

"One of my patients who suffered with facial Neuralgia had seen that tenacious pain disappear after the hypodermic injection of Morphine, and continued its use for Weariness, Insomnia, Spleen, and all other kinds of ailments—until in a short time she became a confirmed Morpho-Maniac.

"The **BROMIDIA** enables me to entirely cure this incessant abuse of Morphine, and the patient has now ceased taking medicine of any kind and is enjoying perfect health."—M. BOURGON, D.M.P., 45 Faubourg Montmartre, Paris, 13th October, 1889.

✦ **BATTLE & CO., Chemists' Corporation,** ✦  
**ST. LOUIS, MO., U. S. A.**

BRANCHES:

76 New Bond Street, London, W.  
 5 Rue de la Paix, Paris.  
 9 and 10 Dalhousie Square, Calcutta.  
 80 Montagne-de-la-Cour, Brussels.  
 28 Nieuwe Hoogstraat, Amsterdam.

## THE TUCKER



## SPRING PAD TRUSS.

THE objections to the old form of Trusses are as follows: 1. They exert pressure at all times, whether needed or not; irritating the back and widening the orifice through which the hernia protrudes. This renders the hernia permanent, and condemns the patient to a life time of Truss-wearing. If the Truss be made so loose as to avoid this pressure, it will not retain the hernia securely.

2. In case of an unusual strain being put upon the Truss, it is unable to retain the hernia, because there is no limit to the expansibility of the spring which encircles the body.

3. The metal of this spring soon becomes corroded by the perspiration, unless nickel-plated or covered with rubber; both of which render the instrument expensive, and the latter is fragile.

All these objections are obviated in the Tucker Truss. There is absolutely no pressure when none is needed. The greater the pressure needed, the more is supplied.

When there is an unusual strain applied, the spring is forced back against the supporting plate and no further expansion is possible, as the belt is inelastic. This renders the Tucker the safest of all Trusses for such emergencies, which may occur to a man at any time. There is no metallic encircling spring to rust, and no metal touching the body. The use of this Truss by men who have tried every Truss in the market, proves the Tucker to be the most comfortable of all. It is one of the cheapest Trusses made, and when parts are worn out, they cost but a trifle to replace.

Price, {	Single	.	.	.	.	.	.	\$4.00
	Double	.	.	.	.	.	.	6.00

A LIBERAL DISCOUNT WHEN ORDERED IN QUANTITIES.

## THE PHYSICIANS SUPPLY CO.,

GEO. WHARTON McMULLIN, MANAGER,

1725 Arch Street, Philadelphia.



# An Open Letter to the Medical Profession.

## THE INFANT FOOD PROBLEM SOLVED.

NEW YORK, May 1, 1890.

*The Annual of the Universal Medical Sciences for 1889, says: "A perfect Infant Food is still a desideratum; such a food will probably be evolved in the mind of some manufacturer who understands the physiology of infantile digestion and the chemistry of milk. A substitute for human milk, to approximate the latter closely, should be made entirely from cow's milk, without the addition of any ingredient not derived from milk.*

*"But not alone do we demand that these Milk Foods contain the equivalent of the solids in human milk, and especially of the albuminoids derived from milk, but that the latter be gathered with the utmost care from properly fed animals, transported with the least possible jolting to the factory, maintained during its transit at a low temperature, then transferred to an apparatus for sterilization, and immediately after the latter has been accomplished reduced to the dry state, in order to prevent the formation of those organisms which Loeffler, Pasteur, and Lister have found to develop in fluid milk after boiling under an alkaline reaction. If such a preparation be put into air-tight and sterilized jars, all will have been accomplished that can be done to render the food sterile, and thus fulfil the chief indications in the prevention of the most serious gastrointestinal derangements.*

*'Such a food, too, would have the advantage of being easily and rapidly prepared by addition of sterilized water, affording an altogether sterilized food.'*

To the Medical Profession at large, we submit for examination and trial the perfect Milk Food known as LACTO-PREPARATA. We claim that LACTO-PREPARATA is an ideal Infant Food, and that it fulfils the above requirements in every particular, except the partial substitution of cocoa-butter for unstable milk-fat. This substitution was made by advice of Prof. Atfield, London, who made extensive tests of its food value and digestibility in the London Hospitals for Infants.

LACTO-PREPARATA is made from cow's milk evaporated in vacuo a few hours after it leaves the udder. In order to have the product correspond in composition with breast-milk, sufficient milk-sugar is added to bring up the carbohydrates and reduce the albuminoids to a proper proportion (17 per cent.). The casein is partially predigested (30 per cent.), and the remaining portion is rendered like human milk in character and digestibility. The ingredients are perfectly sterilized and placed in hermetically sealed cans; the powdering, bolting, and canning are done in an air-tight room, all air entering and leaving this room is forced by a blower through heavy layers of cotton. LACTO-PREPARATA is adapted more especially to infants from birth to six months of age; and by the addition of water alone represents almost perfectly human milk in taste, composition, and digestibility.

Another product of our laboratory, which has been before the profession for a number of years, is CARNRICK'S SOLUBLE FOOD, which, as now prepared and perfected, contains  $87\frac{1}{2}$  per cent. of the solid constituents of milk,  $87\frac{1}{2}$  per cent. of wheat with the starch converted into dextrine and soluble starch, and 25 per cent. additional milk-sugar. For infants over six months of age it is perfect in every respect; for infants younger than this, LACTO-PREPARATA is more suitable, although Soluble Food has also been used largely from birth with most satisfactory results.

Samples will be sent prepaid, also pamphlet giving detailed description.

**REED & CARNRICK,**  
NEW YORK.

## PEPSIN IN INFANTILE DIARRHŒA.

In a recent number of a Journal appears an advertisement under the above caption, which goes on to show that "one of the causes which incites and perpetuates the gastric and intestinal inflammation is undigested, or partially digested, fermenting milk or other food," and that "it is as an aid to the removal of this cause, both in predigesting milk or other food before it is given, and in digesting fermented undigested food in the stomach, that pepsin is indicated in infantile diarrhœa, and its efficacy has been well attested by many well known medical writers," all of which is undoubtedly true.

But the active principles of commercial pepsins are the pepsin ferment proper, and the milk-curdling ferment, and it being only the latter that is concerned in the diet of nursing infants, just to the extent a pepsin contains the curdling ferment is it useful in infantile diarrhœa. Hence, all that the advertising company referred to has to say about the wonderful digestive power of its pepsin as applied to *albumen*, is something like trying to prove black to be white by stating that something else is white—in other words, assuming the statement of the company to be true as regards the digestive power of its pepsin (and it is an assumption), such a mode of test is no proof whatever of the value of the article in infantile diarrhœa.

That the pepsin referred to possesses the *very odor* that its manufacturer names as characteristic of putrefaction, is not only a self-condemnatory fact, but is a sign of danger inadvertently hung out by this would be authority.

All soluble forms of what are termed pure pepsin (*i. e.* free from added material) are more or less hygroscopic, and the pepsin referred to is no exception in this particular—though the company manufacturing it claim the contrary. Any one can prove this by exposing to the air, side by side during damp weather samples of soluble pepsins, using for control a sample of Ford's Pepsin which will be found unaffected by prolonged contact with moist air. Air, heat and moisture are the essential conditions of putrefaction. Either of the two former cannot be guarded against in the case of pepsin, nor is it necessary that they should if ordinary care is exercised against unnecessary exposure. When a manufacturer advises the use of a hygroscopic pepsin as though it were non-hygroscopic, there is liable to be rapid deterioration if the user obeys instructions, and consequently but little medicinal advantage derived, no matter how high the test of the article when fresh.

The medical profession has so long and successfully used **GOLDEN SCALE PEPSIN** for liquid forms and combinations, and **FORD'S PEPSIN** for all dry forms where exposure has been necessary, and either or both for predigestion of foods as well that they may well be ranked as **THE STANDARD PEPSINS**. These have stood the test of time, and withstood the attacks of competitors, therefore must possess intrinsic merits which is the best endorsement.

**NEW YORK AND CHICAGO CHEMICAL COMPANY**  
96 MAIDEN LANE, NEW YORK.

### MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.

The Regular Session begins October 1, 1890, and continues until the middle of April. It is preceded by a Preliminary Session of three weeks, and followed by a Spring Session lasting until the middle of June.

Seats are issued in the order of matriculation, and are forfeitable if fees are not paid before November 1.

Preliminary examination, or equivalent degree and three years graded course, obligatory.

Instruction is given by lectures, recitations, clinical teaching, and practicable demonstrations. In the subjects of Anatomy, Pharmacy, Physiology, Hygiene, Therapeutics, Histology, and Pathology, the usual methods of instruction are largely supplemented by laboratory work.

Examinations are held at the close of each Regular Session upon the studies of that term. Although the degree of Doctor of Medicine is conferred at the end of the third year, a fourth year is earnestly recommended, at the end of which the degree of Doctor of Medicine cum laude is given.

**FEES.**—Matriculation, \$5; first and second years, each, \$75; third year (no graduation fee), \$100; fourth year free to those who have attended three Regular Sessions in this school, to all others, \$100. Extra charges only for material used in the laboratories and dissecting-room. For further information or announcement address, E. E. MONTGOMERY, M.D., Secretary, Medico-Chirurgical College, Cherry St., below 18th St., Phila., Pa.

Exercise not for strength, but for health.—*Isocrates.*

**NINTH SEASON.**

## SANATORY GYMNASIUM—SARGENT SYSTEM,

1420 CHESTNUT STREET, PHILADELPHIA.

TO THE PROFESSION: I shall be glad to take charge of any of your patients, whom you may wish to take physical exercise for the treatment of chronic heart or lung disease, a disordered liver, constipation, dyspepsia, insomnia, chorea, rheumatism, paralysis, spinal curvature, or any acquired physical deformity. Respectfully, W. A. FORD, M.D.

REFERENCES BY PERMISSION: D. HAYES AGNEW, M.D., J. M. DaCOSTA, M.D., DeFOREST WILLARD, M.D.



## PARTURITION.

---

Aletris Cordial [Rio], given in Teaspoonful doses every hour or two AFTER PARTURITION, is the best agent to prevent after-pains and hemorrhage. By its DIRECT tonic action on the uterus it expels blood clots, closes the uterine sinuses, causes the womb to contract, and prevents subinvolution. In severe cases it can be combined with ergot in the proportion of one ounce of fluid Ext. Ergot to three ounces Aletris Cordial. It is the experience of eminent practitioners, in all cases where ergot is indicated, that its action is rendered much more efficacious by combining it with Aletris Cordial in the proportions above stated.

THE TIMES AND REGISTER.

## THE FIRST RAW FOOD EXTRACT.

(Introduced to the Medical Profession in 1878.)

# BOVININE

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

CONTAINING 26 PER CENT. OF COAGULABLE ALBUMEN.

AN IDEAL FOOD.

PALATABLE.

KEEPS PERFECTLY.

**BOVININE** consists of the Juices of Lean Raw Beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteids in solution amount to 26 per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

**BOVININE** is easily digested and COMPLETELY absorbed from the intestinal tract, thus furnishing an extremely valuable nutrient in Typhoid Fever, after surgical operations in the abdominal regions, in all diseased conditions of the intestinal tract characterized by ulceration or acute and chronic inflammation, and in diarrhoeic complaints.

**BOVININE**, containing as it does all the nutrient properties of lean raw beef in a highly concentrated form, furnishes to the Medical Profession a reliable and valuable aid to treatment in Phthisis, Marasmus of both young and old, in all wasting diseases, in continued fevers, and in supporting treatment.

**BOVININE**, on account of its BLOOD-MAKING PROPERTIES is especially of service after surgical operations, in cases of severe injuries attended with great loss of blood, and in the puerperal state.

**BOVININE**, for rectal feeding, is unsurpassed in excellence, having been used for weeks continuously with no irritation or disturbance resulting. The most satisfactory results from its use as an enema are obtained by adding to each ounce of **BOVININE** ten grains of Pancreatic Extract and two ounces of water. This should be well mixed and injected slowly. No preparation of opium is necessary in the enema.

*SAMPLES will be furnished to any member of the Medical Profession free, carriage paid, upon application to the company.*

PREPARED ONLY BY

THE J. P. BUSH MANUFACTURING CO.,

CHICAGO and NEW YORK, U. S. A.

Depot for Great Britain:

.32 SNOWHILL, LONDON, E. C.



## ARISTOL.

ARISTOL, a combination of iodine and thymol, manufactured by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, Germany, is a valuable, inodorous and non-toxic antiseptic remedy, said to be superior to Iodoform, Iodole, and Sozo-Iodole.

ARISTOL is insoluble in water and glycerine, and very sparingly in alcohol, but is very easily soluble in ether and chloroform. The ether solution is precipitated by the addition of alcohol. ARISTOL is very freely soluble in fatty oils. The solution must be made in the cold, by stirring, as the use of heat causes a decomposition. For the same reason it is necessary to protect the body from light, and keep it in opaque bottles. It very readily adheres to the skin, and can thus be used as a powder strewn over wounds and burns.

In cases of mycosis it also acts well, and more quickly than any other known remedy, and does not cause irritation, like so many drugs.

The effective use of ARISTOL in psoriasis is of great interest, as our *Materia Medica* has hitherto supplied us with no non-poisonous drug, save only chrysarobin, the use of which is associated with a deep skin coloration and conjunctivitis—drawbacks from which ARISTOL is absolutely free.

In cases of lupus it is said to surpass even the best known remedies.

The value of ARISTOL can scarcely be over-estimated, as we have it in a drug possessing the good properties of Iodoform, but free from its toxic qualities. Its freedom, too, from any suspicious odor will be at once appreciated, both by the physician and his patient.

ARISTOL, prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, is supplied by us in ounces.

## SULFONAL-BAYER.

**The Value of Sulfonal in Children's Diseases.**—DR. WILLIAM C. WILE sent a paper with this title to the American Medical Association, in which he stated that Sulfonal was the ideal hypnotic. It was without the bad effects of opium and the uncertainty of the bromides. It could be given in 10-grain doses. It quieted reflex irritability. It did not constipate nor disturb the stomach. In one case in which a drachm was taken accidentally in ten-grain doses, there was a deep slumber, lasting twenty-four hours, slight fever, but a normal pulse and respiration.—*Medical Record*, New York.

DR. HENRY M. FIELD, in a paper presented to the American Medical Association, says: "Clinically observed, we recognize in Sulfonal a mild calmative, a slowly, but progressively acting hypnotic; it has no other action, and its operation is attended by no complications, near or remote. It is, therefore, a pure hypnotic, and, we submit, it is the only pure hypnotic we possess, up to date."—*New England Medical Monthly*.

*Sulfonal-Bayer*, prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, is supplied by us in ounces and in the form of Tablets of 5, 10 and 15 grains, put up in bottles of 10 and 100 tablets each.

We also offer *Sulfonal-Bayer* in the form of our soluble pills containing 5 grains each.

## PHENACETINE-BAYER.

**Phenacetine in Insomnia.**—DR. F. PIERRE PORCHER, of Charleston, S. C., writes: "I desire to call special attention to the extreme value of Phenacetine as a remedy for insomnia. Given at night in a little water, it is tasteless, innocuous, and induces sleep. I am confident, also, after repeated trials, that it is the best and most unobjectionable substitute for morphia. It causes sleep when, of course, pain is in abeyance, unless the pain be more than ordinary, and morphia hypodermically may then be required. The remedy may then be repeated and the dose increased to seven or ten grains.

"Suffering from chronic rheumatism of the forearm, I have tested it repeatedly in my own person, and have given it to many who have suffered from insomnia, or inability to sleep from any transient cause, fatigue, nervousness, excitement, etc., in either sex." \* \* \* \* \*—*Medical Record*, New York.

*Phenacetine-Bayer*, prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, is supplied by us in ounces and also in the form of our soluble pills and compressed tablets, containing two, four and five grains each. Either form may be obtained of any reputable apothecary.

It gratifies us to be able to announce that PHENACETINE, SULFONAL and SALOL have been incorporated into the new German Pharmacopoeia just issued, and have been proposed by the General Medical Council of Great Britain for introduction into the forthcoming Addendum to the British Pharmacopoeia. This action confirms and endorses our judgment in introducing these valuable remedies to the medical profession of the United States, and is a natural sequence of the favorable results experienced in their employment, and of the brilliant and conclusive testimony thereof, which had been so freely furnished by the most talented of the profession both in Europe and the United States.

W. H. SCHIEFFELIN & CO.,

170 & 171 WILLIAM STREET,  
NEW YORK.

# FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains **The Essential Elements** to the Animal Organization—Potash and lime.

**The Oxydizing Agents**—Iron and Manganese ;

**The Tonics**—Quinine and Strychnine ;

**And the Vitalizing Constituent**—Phosphorus,

Combined in the form of a Syrup, with *slight alkaline reaction*.

**It Differs in Effect** from all others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

**It has Sustained a High Reputation** in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

**Its Curative Properties** are largely attributable to Stimulant, Tonic, and Nutritive qualities, whereby the various organic functions are recruited.

**In Cases** where innervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

**Its action is Prompt**; stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

**The Prescribed Dose** produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Prepared by **JAMES I. FELLOWS**, Chemist,

**48 VESEY STREET, NEW YORK.**

Circulars and Samples sent to Physicians on application.



# UPJOHN'S FRIABLE PILLS.

**I**NASMUCH as our competitors have been energetically making mis-statements regarding our goods, trying to frighten practitioners from their use, we deem it but right for us to give a few of our friends an opportunity to speak for us in denial of the false statements made.

COHOKS, N. Y., Sept. 11, 1889.

The U. P. & G. Co.,

Gents: Your letter and also pocket case received. I am delighted with it. Like all of your goods, it is elegant and just my ideal of what a pocket case should be. I have long been using Upjohn's Pills and consider them handsome, well finished and always uniform and reliable. Rest assured that I shall continue to use them and will be more than pleased to say a good word for them at any and all times.

Very truly yours, C. E. Witbeck

N. Y., May 27, 1889.

The U. P. & G. Co.,

Gentlemen: We enclose herewith money order for amount of invoice of May 22. We shall be pleased to order of you when our present stock is exhausted. Your pills so far are giving perfect satisfaction.

Yours very truly, Thomas J. Keenan,  
N. Y. Polyclinic, Hospital and Dispensary.

WATERFORD, N. Y., Feb. 1, 1889.

The U. P. & G. Co.,

Gentlemen: Enclosed please find check for amount of statement received. Your Quinine Pills give perfect satisfaction to our physicians; we have sold about sixty ounces within the past year.

Respectfully, John Higgins & Co.

NEWTON, N. J., July 5, 1889.

The U. P. & G. Co.,

Dear Sirs: We have used your Quinine Pills exclusively for the last two years, and are entirely pleased with them. Yours, etc., H. O. Ryerson & Co.

ELMIRA, N. Y., July 19, 1889.

The U. P. & G. Co.,

Dear Sirs: Case of granules received. I am very much pleased with the Upjohn Pills and believe the process will eventually revolutionize the manufacture of pills. Yours truly, F. B. Parke, M.D.

COHOKS, N. Y., Aug. 23, 1889.

The U. P. & G. Co.,

Gents: Enclosed please find New York draft for invoice of July 31 for Private Formula No. 1332.

I must say that the pills are very nicely made and also work to a charm. Please note me 50,000 lots of same.

Respectfully yours,

Jonas S. Ten Eyck.

NEW ROCHELLE, N. Y.

The U. P. & G. Co.,

Gents: I have found your case a great convenience and its contents have been very helpful to my patients. The case has already paid for itself *ten times over*.

Yours, E. W. Finch, M.D.

NORTH MANCHESTER, IND., Sept. 14, 1889.

The U. P. & G. Co.,

Dear Sirs: I have received the pills manufactured by your house (Special Formula) and I like them very much. When I need anything in your line I know where to get it. Enclosed you will find money order in satisfaction of same. Yours truly,

D. A. Goshorn, M.D.

TERRE HAUTE, IND., July 23, 1889.

The U. P. & G. Co.,

Dear Sirs: Recently when prescribing pills and granules, I have specified those of your manufacture. They have invariably given the best of satisfaction.

Yours very truly,

Cort F. Askren, M.D.

SHELBYVILLE, ILL., Oct. 19, 1887.

The U. P. & G. Co.,

My Dear Sirs: The pills came to hand this morning; enclosed find P. O. Order for same. I am very grateful to you for sending them. I have always found your goods reliable. Respectfully,

Dr. A. M. Collins.

"THIS IS AN AGE OF APOLLINARIS WATER."

—Walter Besant.

# Apollinaris

"THE QUEEN OF TABLE WATERS."

The filling at the Apollinaris Spring [Rhenish Prussia] amounted to

11,894,000 BOTTLES IN 1887,  
12,720,000 BOTTLES IN 1888 AND  
15,822,000 BOTTLES IN 1889.

"The annual consumption of this favorite beverage affords a striking proof of the widespread demand which exists for table water of absolute purity, and it is satisfactory to find that, wherever one travels, in either hemisphere, it is to be met with; it is ubiquitous, and should be known as the cosmopolitan table water. 'Quod ab omnibus, quod ubique.'"—  
British Medical Journal.

## The Best Natural Aperient.

THE APOLLINARIS COMPANY, Limited, London, beg to announce that, as numerous Aperient Waters are offered to the public under names of which the word "Hunyadi" forms part, they have now adopted an additional Label comprising their registering Trade Mark of selection, which consists of

### A Red Diamond.

This Label will henceforth also serve to distinguish the Hungarian Aperient Water sold by the Company from all other Aperient Waters.

DEMAND THE



DIAMOND MARK.

And insist upon receiving the Hungarian Aberient Water of the APOLLINARIS COMPANY, Limited, London.